

APR 19 1935

AMERICAN NURSERYMAN

Chief Exponent of the American Nursery Trade

Vol. LXI No. 5

MARCH 1, 1935

15c per copy

The Nursery Business, Past and Future

By Charles H. Hawks, Jr.

Possible Solutions of Current Trade Problems

By L. C. Chadwick

The Outlook for Fruit Tree Planting

By H. B. Tukey

AMERICAN NURSERYMAN PUBLISHING CO.
508 S. DEARBORN ST. CHICAGO, ILL.

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AMERICAN NURSERYMAN

Chief Exponent of the Nursery Trade

F. R. KILNER, Editor

Published Semi-monthly by

AMERICAN NURSERYMAN
PUBLISHING CO.

508 S. Dearborn Street,
Chicago, Ill.

Telephone: Wabash 8194.

New York Office—67 West 44th Street
N. L. Huebsch Tel., Murray Hill 2-4871

Entered as second-class matter December 14,
1933, at the post-office at Chicago, Ill., under
the act of March 3, 1879.

SUBSCRIPTION PRICE, \$2.00 per year; out-
side the United States, \$3.00. Single copies,
15 cents.

ADVERTISING RATES on application. Forms
close on 10th of month for mid-month issue
and on 25th of previous month for first-of-
month issue. If proofs are wanted, copy
should be on hand one week earlier.

EDITORIAL communications on subjects
connected with nurseries, arboriculture or
other phases of commercial horticulture are
welcomed by the editor. Also articles on the
subjects and papers prepared for conventions
of nursery associations.

PROGRESS IN REVITALIZING.

Radical modifications of existing in-
stitutions are achieved only when there
is sufficient pressure of public opinion
to overcome the natural inertia that
hinders so many needed improvements.

So there is real hope that the project
for revitalization of the American As-
sociation of Nurserymen, and the indus-
try at large, will have a successful out-
come. State organizations have not only
heard the plans and voted resolutions
favoring them, but in several instances
these bodies have started similar plans
of their own. In some cases these are
modest, in others far-reaching, but in
either case the symptom is a good one.
The widespread recognition of the in-
dustry's need for coordination of efforts
and standardization of practices is the
surest indication that action will be
taken for improvement.

Yet, while many recognize the defects
in present conditions, not many specific
proposals have been forthcoming as to
methods to remedy them. As is empha-
sized in Mr. Hawks' able comments in
this issue, the most important phase of
revitalization is the definition of aims

The Mirror of the Trade

and purposes which will make an asso-
ciation so needed and desired that every
nurseryman will contribute his share
toward the expense of its undertaking.

Several valuable articles on the sub-
ject have been appearing in The Ameri-
can Nurseryman, and an invitation is
outstanding to readers to contribute
their ideas, so that the committee pre-
paring proposals for the A. A. N. con-
vention in July will have the benefit of
numerous and specific views from the
trade at large.

on the fare currently served to readers
of this magazine, has asserted that it
should be before every nurseryman in
the country. The rapidly growing sub-
scription list is heading in that direc-
tion, but present subscribers may accel-
erate the progress if they will urge their
neighbors in the trade to send in their
subscriptions and give the magazine the
support which will enable it to widen
its circle of contributors and trade serv-
ice still more.

FREIGHT CLAIMS BILL.

Senate bill No. 1631 has been intro-
duced in Congress by Senator Burton
K. Wheeler and a similar bill in the
House by Congressman Rayburn, to re-
duce from three years to one year the
time in which overcharge claims against
carriers can be filed. Many years ago
the time limit was six years, but the
Interstate Commerce Commission re-
duced the time to three years, and not
many shippers objected, as they felt
sure that in three years they could
check up their freight bills and secure
refunds on any overcharges made.

However, to reduce the time to one
year would work a great hardship upon
many shippers, and especially nursery-
men, as by the time they get through
one season, they have to prepare for
another and quite often do not get to
checking their freight bills until a year
or more later. If this bill becomes law,
shippers may be unable to file their
claims until the statute of limitation
has expired against them.

The coordinator of the railroads, Mr.
Eastman, a former member of the In-
terstate Commerce Commission, has
recommended favorable action on the
bill, it is understood.

Presenting the foregoing factors in
a letter to members of the American
Association of Nurserymen, Secretary
Charles Sizemore urges that each mem-
ber immediately write his Congressman
and Senator and urge the defeat of the
bill.

NEW CONTRIBUTORS.

Among pleasing experiences of the
new editorial management in its revital-
ization of this magazine during the past
year has been the readiness of well in-
formed trade figures to contribute to
these columns. Supplementing a more
nearly complete presentation of the in-
dustry's news than has been available to
nurserymen in the past, regular features
are contributed by writers whose posi-
tion is acknowledged and whose writ-
ings have won approbation in this peri-
odical and others.

A growth of the magazine brings more
space for such informative material, and
new contributors are therefore being
added. Without failure to give due cred-
it to those longer in these pages, men-
tion may be made of the warm welcome
of the new writer on perennials, par-
ticularly for rock gardens, starting in
the preceding issue, Gabriel Simon, a
young Ohio nurseryman, who has made
a name for himself in this line in a few
years. In the present issue begins a
column of comments from H. B. Tukey,
chief in research at the New York state
agricultural experiment station, at Gen-
eva, whose article on "Problems in the
Fruit Tree Nursery" won merited praise
for its exposition of current problems
and solutions which the future may
bring. As a writer on fruit tree topics
in other magazines, he has made a name,
and his experience will be valuable to
readers of The American Nurseryman.

More than one reader, in commenting

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AMERICAN NURSERYMAN

[Registered U. S. Patent Office]

The Chief Exponent of the American Nursery Trade

*The Nurseryman's Forte:
To Make America More Beautiful and Fruitful*

Vol. LXI

MARCH 1, 1935

No. 5

The Nursery Business—Past and Future

**Charles H. Hawks, Jr., of Hawks Nursery Co., Wauwatosa, Wis.,
Traces Rise of Industry in This Country and Discusses Its Future**

Before mentioning its present problems or attempting to forecast anything about the future of the business from which we are all trying to derive a living, let me take time to review its development.

With few exceptions, those who first settled along our Atlantic coast arrived in this country with very meager means and for several generations were kept busy producing the barest necessities for their families. Gradually, through large families and continual immigration, towns and villages developed to meet the demands of the rural population, and those best fitted or most apt became the butcher, the baker or the candlestick-maker. No longer in the older communities was each family self-sustaining. It had developed a surplus to trade for those items others could furnish better and more economically.

Practically all the first fruits which had been developed in this new country were from seeds brought by the settlers, as few European trees, as such, had succeeded under the climatic conditions here. As the settlements gradually extended farther west, the practice of taking seeds from the older communities or from Europe continued, for the long days and weeks of travel and the poor roads and methods of conveyance did not allow for any excess baggage. Thus, practically all orchards of those days contained only "natural" or "seedling" trees, even though most of the fruit produced was of little value.

The First Nurseryman.

It was under these conditions that the first nurseryman appeared to fulfill the demand for better fruits just as the miller, the smith or the storekeeper had found a place for himself in catering to the needs of his neighbors. We must assume that this first nurseryman was just an ordinary farmer like all the other settlers, but that, through more luck than foresight, fruit had been developed on his land far superior in quality to that of his neighbors. This better fruit was naturally desired by others, and to fill this demand seedling trees were produced from this better tree, as well as scions being furnished and grafted on the trees near by. Many of our old stand-by apples, such as the Baldwin, Northern Spy and

Rhode Island Greening, were first discovered in these old seedling orchards and took their names from the locality where found or from the man offering them for sale.

This more or less primitive method of producing and distributing fruit trees continued until about the middle of the last century, although many nurseries had sprung up before that time. One of the earliest nurseries to be mentioned in horticultural writings was that established by Robert Prince about 1730 at Flushing, Long Island. The Huguenots who settled this territory brought with them a variety of French fruits and much interest in horticulture. To meet the demand created by these settlers, this nursery was started. For years its efforts were confined to the production of fruit trees with which to stock the new country. By 1850 the planting of seedling orchards had passed to that of grafted trees, due to the rapid developments in transportation which opened an outlet for quality fruit. Heretofore the fruit from seedling trees could only be disposed of locally, turned into cider or left for the cattle to feed upon.

With this ready market for grafted trees, many large nurseries now developed, not only in the east, but also in certain favored locations farther west. Probably these early nurseries first enlarged their field of trade by the use of catalogues, as they are mentioned and ranked as standard horticultural publications of the country between the years of 1815 and 1850. Several of our present-day nurseries date from this period.

Agency Origins.

However, with still limited transportation facilities for the great rural population (poor roads, no regular mail delivery, and shopping centers far apart), catalogues could reach but a few, and the itinerant "tree man" comes into the picture. Many of these men worked for themselves or hired a few helpers to work with them. After thoroughly covering one territory, they moved to another, booking orders wherever and whenever possible until shortly before the planting season. When this time of year arrived, they gathered at nursery centers mentioned before and there purchased and packed

the stock to fill the orders sold. I have heard my father say that back in the 1870's and 1880's there was a time when as many as 200 to 300 such men assembled at Rochester, N. Y., each spring. Most of them were young and, on marrying, left the road and started nurseries of their own. This was the origin of many of the present agency firms.

These methods of selling and distributing nursery stock direct to the customer, either by means of the catalogue or commission agent, remained more or less the same until the advent of the automobile. Most of the sales efforts were concentrated on the fruit end of the business, as it was there that the steadiest demand lay. To be sure, ornamentals were sold, one or two being usually featured or pushed each year. And if you do not think a large quantity was sold, just think back to the time when few houses escaped the beautifying effect of a golden glow or some other outstanding novelty whose merits had been highly extolled and sales arguments backed up by a brilliantly colored lithograph! City yards were small in those days, and the home owner who enjoyed spending his leisure hours in a garden generally grew only small fruits and vegetables. To him was unknown anything more of ornamentation than a bridal wreath here or a hydrangea there.

Automobile's Advent.

Now think of the countless changes which have taken place in the past fifteen or twenty years, and I think you will agree with me that no invention has ever so rapidly influenced or changed the living conditions of the average man as has the automobile. It has always been human nature to desire the comforts, pleasures and possessions of others and to strive for their attainment. Think, then, what the automobile did when placed within the means of practically every American family. Whereas the family was content before to regulate and fashion its desires after those in its immediate circle, the automobile took it far from this limited group and unlocked the doors to countless new comforts, pleasures and desires.

To the automobile we can trace the increased demand for ornamental stock.

Until its common use, few but the well-to-do with large grounds ever gave serious consideration to a well designed planting around their homes. Now, in their weekly trips by automobile, many saw these beautiful plantings for the first time and desired to duplicate them, at least in part, in their own yards. Thus the modern demand for ornamentals was created and augmented by the vast number of new homes with larger grounds which the automobile had made possible through enabling the home owner to live farther from his work.

Local Nurseries.

However, this increased demand for ornamental stock was not the only effect the automobile had on us nurserymen. No longer was the farmer or city dweller dependent upon the catalogue or nursery agent for his planting needs. Within a few minutes' time his automobile would carry him directly to the nursery to see for himself the stock he wished to buy, or in a few hours' time to several nurseries to compare prices and quality. So again, just as nurseries had sprung up in the past to meet certain demands, with the coming of the automobile came also local nurseries to get their share of this trade.

With this summary I have brought my subject up to the present time, and from it we can draw the conclusion that the nursery trade has had its development step by step with changes of the country. We have not been handling a new commodity which by way of an introduction needed an educational publicity campaign or any advertising to create a demand. From the earliest times the human race has been accustomed to surrounding its homes with trees and plants, and no deep-laid or farsighted plans were necessary for the nurseryman who exchanged his products for the customers' dollars. Up to within recent years the demand has always exceeded the supply; a fair price could be had for our merchandise, and profits were made with little thought as to the costs of doing business.

The Future.

When we look into the future and try to prophesy what it holds for us, one guess is as apt to be correct as the next. However, a few situations which may appear in the near future I should like to touch upon.

For the coming year I believe I am safe in saying that we shall all feel a material improvement in the demand for our goods. With this increased demand, those of us who can put from our minds the bugaboo of our competitors' low prices and will even turn down orders for stock we should dispose of unless a reasonable price can be received will find at the end of the season a much more healthy profit and loss statement.

In comparing a recent list of Wisconsin nurseries for 1934, I discovered that it had shrunk eighteen per cent from the 1933 total, which was much smaller than the previous year's. That this condition is maintained in other states we have no reason to doubt. Shall we blame these business deaths all to the depression over which as individuals we could exert no control, or

were there some factors involved which every nurseryman should have considered?

Retail Mark-up.

Dun & Bradstreet have recently completed a retail business survey covering the year 1933. Thousands of questionnaires were sent to retail merchants in all lines of distribution, and replies were received from approximately 35,000. As is to be expected, the figures after compilation show a wide variation from one group to another, yet one item is common to all. Those making a profit in every case show a greater mark-up in the price of their goods than those reporting a loss. From the nature of the commodities handled, a profitable mark-up varies greatly, one group compared with another, yet these conclusions must be drawn:

"Turnover would be highest in food-stuffs because of the perishable nature of the products, and that turnover would tend to decrease from the lighter consumer-type goods to the heavier, capital-type goods.

"It is equally clear that quick-moving goods do not require high mark-up, but that a high mark-up is essential where stock is turned comparatively few times a year.

"Another factor makes for high mark-up in a number of lines; that is, the degree of manufacturing involved."

Our line of merchandise is perishable, yet comes on the market really but once a year and, if a profit is to be made, must be so priced that the stock sold will carry the load of that unsold. This may not be considered sound business method by those unfamiliar with our product, yet it is a problem which at the present time may be met in no other way.

Our stock is not quick-moving, as we invest our money in a line of goods of which many items may not be available for sale in two, three, five or ten years. During all these years our manufacturing costs go on, and the labor needed to produce these goods has to be considered when the final selling price is made.

Affect Nurserymen's Prices.

All three of the high mark-up factors appear in the merchandising of our product, and the nurseryman who really wants to get back to a stable footing and out of the red cannot overlook these factors when quoting prices.

Some of you may say that these factors are not all applicable to the nursery dealer who buys from the wholesaler all that he sells. His turnover is rapid, to be sure, but it turns only once in a year. Careful handling is labor, another factor affecting correct selling price. The stock is perishable, and figure as closely as possible, it is not likely all will be disposed of, again adding to the correct selling price. Let us compare this dealer with the small retail grocer who has \$2,000 invested in his stock of goods. If his average mark-up is only five per cent and he turns his stock once a month during the year, his gross profit at the end of the year will be \$1,200. The nursery dealer with the same amount invested, \$2,000, must mark up his merchandise sixty per cent if his gross profit is also

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to be \$1,200 at the end of the year, without considering labor or undisposed stock.

Looking a little bit farther into the future, I can see another prosperous period for the nursery trade. Recent statistics show that since 1929 over 4,000,000 families in the United States have been forced to leave their homes and to double up with relatives. In addition, 1,000,000 new families have been formed during these years. Already the unscrambling of these families is slowly taking place, as is proved by the increase in telephone, electric light and gas subscribers. During these years there has been practically no new building, while at the same time fire has destroyed \$500,000,000 worth yearly and countless homes of fifty years or more of age have become uninhabitable. These 5,000,000 families will soon be seeking new homes, and we know a large majority of them will demand our products.

New Organization.

However, before these better days return, steps must be taken by us nurserymen to form new organizations or reorganize existing ones so that the mistakes and near mistakes of our prosperous past may not be repeated and the nursery industry again dropped into an almost bottomless pit.

The American Association of Nurserymen, I believe, was inaugurated approximately fifty years ago. Like all similar organizations, it probably had for its purpose the betterment of the industry it represented. Through its creation, much benefit was derived by all its members. As the association grew and took unto itself more and more functions, such as fighting for reasonable freight rates, equitable quarantine regulations and sane national and state legislation, its influence assisted those not affiliated as well as its members. In 1927 or 1928, when practically all nurseries were feeling more than prosperous, the American Association of Nurserymen fostered the national advertising campaign, with the idea of an outdoor living room for every home in America. The idea was splendid, but the results obtained were not so good. For a year or two it probably did increase the demand, but many of those who contributed to the advertising fund woke up to find that they had been financing a project which was increasing the sales of the wholesale and catalogue companies, the department stores and many small new nurseries and dealers which had sprung up to get their share of this new business. No longer was it true that what benefited one nurseryman would also or to an equal degree assist his neighbor.

Code Impossible.

Since the summer of 1933 we have watched the attempt made to formulate a marketing agreement and a code of fair practices satisfactory to the nursery industry as a whole. Now we realize it was an impossible task from the first. That which is food for the wholesaler is poison for the retailer; what is sauce for the agency firm is not necessarily sauce for the landscape nursery. Each group, because of its different methods of operation and distribution, wants, and must have, en-

tirely unique agreements and regulations to govern its business methods and practices, if it is successfully to join with others in forming a workable organization which will function in the interests of each member.

That others realize these differences and the consequent necessity of reorganizing our industry is shown by the appointment of a committee which is now studying this problem for the American Association of Nurserymen. Just what its conclusions and recommendations may be will not be known before its report at the annual meeting in Cincinnati next summer. At the present time but a comparatively few nurserymen are members of this central organization. Many have dropped out for the simple reason that no longer do they benefit to a degree comparable with those in some other member group.

With these facts, is there any longer a need for the American Association of Nurserymen? I believe there is—but only after a reorganization which would so completely change its present methods of operation that little of the old would remain except the name.

Aims of Association.

What methods, aims and purposes must this newly reorganized association adopt to benefit all nurserymen, help them solve their problems and adjust the conflicts of group interests? First, a new constitution and by-laws should be drawn, providing for a division of the industry into sections such as wholesalers and retailers. These two major groups should again be subdivided as to methods of distribution. Each such subdivision would in turn have its smaller affiliates geographically located as conditions might require. Memberships would be taken out in these smaller units and the dues received passed on in part to the higher subdivisions and central organization.

Under such an arrangement every member would find things of interest and value to him when attending national or sectional meetings. The identity of the individual groups would be maintained by each holding its own meetings, for consideration of the problems and subjects directly affecting its members. Joint meetings of all groups would be held only for the election of officers or to consider problems common to all.

Must Be a Purpose.

However, simply reorganizing cannot put us on the path to permanent and steady prosperity. There must be a purpose back of all this which will attract a membership of all qualified nurserymen and at the same time gain the support and confidence of the general public. An intelligent publicity plan is needed and must be continued through the years until the lack of confidence and open suspicion with which the public now views many nurserymen has become a thing of the past. Our problem is not one of creating a demand, but to educate the public so that it will seek the legitimate nurseryman, an accredited member of the national organization.

Today, price is the only yardstick the customer recognizes when he seeks to

buy a few plants. If they are inferior and fail to grow, he becomes distrustful of the whole nursery fraternity. If the quality is good, but, due to lack of knowledge, the planting and after care cause failure, again the nurseryman is blamed. Whom is the buyer to believe? One nursery recommends the planting of a variety only to have its suggestion belittled and condemned by a competitor. When it comes to prices the situation is even worse. Is it any wonder that many of our customers have accepted the old maxim, "Let the buyer beware"?

To Win Public Confidence.

To make this publicity program effective, the public must be educated as to what standard grades of nursery stock are. The members must agree to advertise and list honestly and prominently the actual grade they offer at a given price. Our goods are in a class which makes it practically impossible to educate the customer to a point where he can judge for himself its relative value. Our merchandise is not comparable to shoes, clothing, household utensils or the thousand and one consumable articles the customer has learned to appraise from early childhood. When purchasing nursery stock the customer must be taught to consider the source of supply and the organization back of it.

The personnel of this new association must contain nurserymen of real integrity, whose knowledge, ability and experience will assure the buying public of complete satisfaction in every deal. Should there be cause for complaint, and it not be satisfactorily adjusted by the seller, the case, if worth while, should be presented to the organization for an unbiased decision. If its reviewing board finds the nurseryman guilty of unethical practices, he should be suspended until such time as an amicable adjustment has been made.

These suggestions are the ideas which

have occurred to me as to the methods we should adopt to put the nursery industry on a par with the many others competing for a prosperous place in the business world. Only by means similar to these outlined can we create an organization which will stand the test of time, which will meet the needs of our fellow nurserymen and which will place us all in a position of respect and confidence with the buying public.

TIES SMALL NURSERY STOCK.

For a long time vegetable growers have had the help of a machine for tying their produce into bunches for the market.

Nurserymen generally have continued to tie small nursery stock by hand. There are a number in the trade, of course, who have given themselves the aid of a mechanical tyer, and the illustration on this page shows one of many uses to which this machine can be put. The material in these bunches is all nursery stock, such as roses, perennials and shrubs. Other uses are tying grafts, cuttings, pussy willows, roots of roses and shrubs where roots are spread, roses and shrubs wrapped separately for store trade, mail-order packages, strawberry and raspberry plants, gladiolus blooms, statice, peonies and many other items where the diameter is not greater than six inches.

The machine is so constructed that any size of cotton twine from 6 to 16-ply can be used, also tape on which a trade name is printed to identify the package and advertise the establishment. Then, too, it will adjust itself automatically to any size bunch from one-quarter inch to six inches in diameter, making it possible to complete thirty ties in a minute.

This mechanical tyer speeds up and puts system into the bundling end of the industry, eliminates the waste of time of hand tying and thereby pays for itself several times in a season according to output.



Machine Tying Bunches of Nursery Stock.

FIGHT ON DUTCH ELM DISEASE.

The enlarged federal campaign to save the American elm from the fate of the American chestnut is now in full swing against the Dutch elm disease. The war is being waged over 5,000 square miles in New York, New Jersey and Connecticut, all within a radius of fifty miles of the port of New York, where the disease entered this country. Nearly 7,700 Dutch elm disease trees and 30,000 dead and dying or unsanitary elms have been chopped down and promptly burned. The sanitation program was made possible by an allocation of funds from the Public Works Administration and of men from the Civilian Conservation Corps. A total of 142 crews, 68 in New York, 44 in New Jersey and 30 in Connecticut, is now attacking the 175,000 dead and dying elms which may be possible sources of the disease as well as breeding places for insect carriers of the disease.

The C. C. C. crews are usually called upon to penetrate into the thickly wooded and swampy areas where elms may grow abundantly. Each crew consists of a foreman, a technician and from 10 to 26 enrolled men. The P. W. A. crews that operate in the urban and partially developed areas are usually made up of a foreman, a tree climber, a truck driver and three laborers. A field supervisor has general direction over five crews, and he is responsible to a district leader. State leaders are in charge of the work in New York, New Jersey and Connecticut. The entire campaign is under the direction of L. H. Worthley, of the bureau of entomology and plant quarantine, with headquarters at White Plains, N. Y.

The only way to stamp out this virulent plant disease is to search out and destroy every infected tree in the area. A single diseased elm tree is a menace to all healthy elms everywhere in the United States. Furthermore, once a tree becomes infected with the Dutch elm disease, it is doomed. Allowing such a tree to stand, therefore, results only in the useless sacrifice of many valuable elms in the area.

Diseased trees are located by scouting crews which carefully comb a given area several times during the summer months. The eradication crews, following the way blazed by the scouts, chop down all diseased trees as soon as possible. All the wood from the Dutch elm disease trees must be burned immediately to avoid the escape of the fungus and insect carriers. Last summer, unavoidable delays made it impossible for the eradication crews to keep abreast of the scouting crews over the whole area. The scouting and eradication crews should cover each area for several years until the last of the enemy is found and destroyed.

PASSES BAD CHECKS IN SOUTH.

More than fifty bad checks have been cashed in Florida, Alabama, Georgia and Louisiana by a man representing himself as Mr. Young, an official of the Greensboro Nurseries, Greensboro, N. C., operated by John A., Jr.; James W., and Mrs. John A. Young. Recently E. A. McIlhenny, Avery Island, La., cashed a check for the man after he had bought \$200 worth of plants, only to learn that the purchaser had no connection with the Greensboro firm and had victimized many other nurserymen in the south.

NEW ELM QUARANTINE.

A new federal quarantine on account of the Dutch elm disease prohibits movement out of the regulated area in New York, New Jersey and Connecticut of any elm plants or parts thereof. It became effective February 25 and applies to all plants or parts of plants of all species of the genus *ulmus*, whether grown in nurseries, forests or on private property. The quarantine, known as notice of quarantine No. 71, applies to: (1) Trees, plants, leaves, twigs, branches, bark, roots, trunks, cuttings and scions of such plants. (2) Logs or cordwood of such plants. (3) Lumber, crates, boxes, barrels, packing cases and other containers manufactured in whole or in part from such plants, unless the wood is entirely free from bark.

The areas under regulation are as follows:

Connecticut—Towns of Darien, Fairfield, Greenwich, New Canaan, Norwalk, Stamford and Westport, in Fairfield county.

New Jersey—Counties of Bergen, Essex, Hudson, Passaic, Somerset and Union; townships of Princeton and West Windsor, and the city of Princeton, in Mercer county; townships of East Brunswick, Lincoln, Milltown, North Brunswick, Piscataway, Raritan, Roosevelt, Sayreville, South Brunswick, South River and Woodbridge; boroughs of Dunellen, Highland Park and Metuchen, and cities of New Brunswick, North Amboy and South Amboy, in Middlesex county; townships of Bonton, Chatham, Chester, Denville, Hanover, Jefferson, Mendham, Montville, Morris, Passaic, Pequannock, Randolph, Rockaway and Roxbury; boroughs of Dover, Florham Park and Mendham, and cities of Madison and Morristown, in Morris county.

New York—Counties of Bronx, Kings, Nassau, New York, Queens, Richmond and Rockland, and towns of Bedford, Cortland, East Chester, Greenburg, Harrison, Mamaroneck, Mount Pleasant, Mount Vernon, New Castle, New Rochelle, North Castle, Ossining, Pelham, Poundridge, Rye, Scarsdale, Somers, White Plains, Yonkers and Yorktown, in Westchester county.

The Dutch elm disease was first found in this country in 1930 and is at present known to occur over an area extending for about fifty miles from New York harbor, where it is believed the disease was introduced from Europe by means of infected burl elm logs. This infected area extends into parts of the states of New Jersey, New York and Connecticut, in which an intensive campaign aimed at the eradication of this disease is being conducted at the present time, which has resulted in the location and destruction of approximately 7,600 diseased elm trees. So far as is known, this disease does not attack any native trees other than elms.

FORBIDS USE OF "NURSERY."

First National Nurseries, Inc., Rochester, N. Y., and the firm's president, Leland C. Brown, were recently ordered by the federal trade commission to refrain from using either the word "nursery" or "nurseries" in interstate commerce until the firm owns and operates a nursery on which a substantial part of the stock sold by it is grown. In 1931, suit to enjoin Mr. Brown's firm from using "nursery" in its name was started by the Chase Bros. Co., Rochester, which charged unfair competition. There was a hearing last August before a representative of the commission and the order, giving the decision of the commission, was made public January 28. The commission held that "nurseryman" means "grower" and does not apply to those persons who sell nursery stock not produced by them.

EVERETT J. REBELL, of the F. & F. Nurseries, Springfield, N. J., recently addressed the Women's Club, Millburn, N. J.

AMERICAN NURSERYMAN

PLANT BOARDS AT MIAMI.

In order to get first-hand information on the southernmost insect eradication problems of the country, the national plant board met at Miami, Fla., with the southern plant board during the week of February 4.

The wild cotton eradication work at Cape Sable being conducted by the United States Department of Agriculture and the Florida plant board proved most interesting. At Key West the board studied the eradication by spraying and clean-up work of two species of fruit flies and of the black scale. These pests constitute a threatening menace to semitropical horticulture.

International airports were again recommended to the national committee on airways, so that planes arriving from foreign countries might be grounded for inspection on the border as a means of preventing the introduction of plant pests from foreign countries.

The national board approved the revoking of federal quarantine 62 referring to narcissus bulb importation, since it found that the action of the Secretary of Agriculture was in line with its previously expressed "principles of quarantine."

It is likely that the national plant board will call a conference of all state plant quarantine officers to be held in July, 1935, in Chicago. The conference will be held to consider plant quarantines in general.

The national plant board is composed of eight representatives, two of which are elected by each of the four regional plant boards. It was organized in 1925. Twelve meetings have been held, and a total of seventy-five subjects relating to plant quarantine work and insect and plant disease eradication has been under consideration by the board one or more times.

W. C. O'Kane, Durham, N. H., is chairman of the board. Other officers are G. A. Dean, Manhattan, Kan., vice-chairman, and R. W. Leiby, Raleigh, N. C., secretary.

ONARGA FIRM IN NEW HOME.

Recently the Onarga Nursery Co., Onarga, Ill., moved into new quarters along state route No. 25, the building of glazed tile replacing the frame structure destroyed by fire last June.

Offices, a reception room, a cutting room and storage facilities are all provided space in the new building, which is 112x197 feet. Below the storage room and to the west are a rose cellar and the furnace room, the offices being heated by a steam system. The private office of A. J. Cultra is on the second floor, where there are also other rooms.

ROSE PUBLICATION.

Under the title of "Success with Roses, the Magazine for Rose Lovers Everywhere," the Conard-Pyle Co. is issuing a little quarterly to rose buyers, combining its previous publication, "Rose News."

This measures 6x9 inches and contains eight pages of illustrated reading matter, inclosing eight pages in colors from the Conard-Pyle catalogue, so that it is a sales medium for the firm in addition to a means of promoting interest in roses among amateurs.

Northeastern Ohio School

Nurserymen Gather at Painesville for Lectures by
Staff of Horticultural Department of State University

More than 100 nurserymen from northeastern Ohio gathered at Painesville, February 20 and 21, for the first northeastern Ohio nursery school and to hear discussions of timely nursery problems. Due to the sickness of the Lake county agricultural agent, F. G. Haskins, the school was conducted by Prof. L. C. Chadwick, of the department of horticulture at Ohio State University.

"New Practices in Propagation" were discussed by L. C. Chadwick at the opening session. Considerable emphasis was placed upon the current supply of nursery stock and a logical production program for the future. The propagation program should be based on a reasonable demand for stock of all classes and sizes. Attention should be paid to some of the newer plants for which there is a limited demand at the present time. Uncontrolled propagation will lead to overproduction and low prices, an unprofitable business situation, similar to the one through which the trade has been passing.

The possibility of using electric cable as a means of heat for propagation was discussed. It is considered economically feasible to use this method of furnishing bottom heat for hotbeds for the usual run of softwood cuttings if the cost of electric current is not higher than 3 cents per kilowatt hour. At this rate the cost for rooting softwood cuttings would be about 5 cents per square foot of bed area, or about one-tenth cent per cutting.

Recent tests have shown that cuttings of American and Japanese holly can be rooted easily if taken late in July and placed in a peat medium. It is best to use only the middle and basal parts of the canes when making rose cuttings. Leaf-bud cuttings may be used for propagating black raspberries and purple raspberries when propagating stock is limited.

Hastening Seed Germination.

Recent investigations have shown that many of the so-called 2-year seeds will germinate the first year if properly handled. The best practice for most types seems to be storage in a moist medium for three to four months at 68 to 70 degrees in order to weaken the seed coat, followed by a storage period of three to four months at 40 to 45 degrees. The cold temperature is necessary to overcome the rest period of this class of seeds.

The prevention of damping off in seed flats and beds is an important practice. Recommended measures include steam sterilization of the medium, the use of formaldehyde dust or the more recently recommended combined treatment of red copper oxide and zinc oxide dusts. In this treatment the seeds are dusted with the copper oxide, two and one-half per cent by weight, just before sowing. After sowing, zinc oxide is added to the soil surface at the rate of two-thirds ounce per square foot. This treatment has worked well with many seeds, although seedlings of dianthus, gypsophila, petunia, Phlox Drum-

mondii, poppy and pyrethrum have been injured somewhat.

Bulb Crops.

Discussing "Bulb Crops," Prof. Alex Laurie brought out many fundamental points regarding soils, fertilizers, propagation, planting and storage. For gladioli a slightly acid, sandy loam soil is best for general production, although a heavier soil is best for developing forcing corms. Phosphorus and potash should be added at the rate of 1,000 to 2,000 pounds per acre at planting. Add a nitrogenous fertilizer at the rate of 200 to 400 pounds as a side dressing when the plants are a foot high. A list of forcing varieties was given, including, among others, Picardy, Minuet and Cardinal Prince.

For success with dahlias, use a neutral, light loam soil. Fertilizers such as a 2-10-10 or 2-10-6 are best. Propagation may be by seeds, tubers or cuttings. Storage of the tubers should be at a temperature of 35 to 50 degrees.

The requirements for the production of lilies on a commercial scale include a relatively low temperature, high humidity, a well distributed rainfall and a porous soil relatively high in organic matter. Propagation may be by seeds, scales, stem bulbets and bulbils. Planting and storage practices were given for several species of lilies.

A sandy loam soil is best for the production of peonies on a commercial scale. Division and planting should be practiced in September. Use a 0-10-10 fertilizer at planting time and a nitrogenous fertilizer the following spring. Failure of peonies to bloom may be due to recent transplanting, too deep planting, late freezes or botrytis blight.

Tulips need a plentiful supply of moisture from October to June. Localities where there is not a too rapid transition from winter to summer are best. Planting should be done in September and October on a deep, light soil. Dig in July after the tops have died down and store in a dry, cool place.

Spray Materials.

Due to the fact that Harry F. Dietz, research entomologist of the Grasselli Chemical Co., was unable to be present, Professor Laurie opened the afternoon session with a discussion of "Spray Materials," in which he mentioned many different materials, giving their cost, active ingredient, dilution, use and cost per gallon or pound of the material ready to use. This talk was much the same as presented at the short course at Columbus and reported in the February 1 issue of The American Nurseryman.

The next talk that brought forth considerable discussion was "New and Worthy Herbaceous Perennials," by Gabriel Simon, of the Sunnybrook Farms Nursery, Chesterland, O. This talk was the same as given at Columbus, reported in the February 1 issue of The American Nurseryman.

In the evening the members of the Lake County Nursery Association were hosts at an excellent dinner. Entertaining music was furnished during the course of the meal by a local orchestra. The evening was given over entirely to the program. Mr. Shipman, a naturalist from Willoughby, showed some excellent colored slides of herbaceous plants and gardens, which he discussed in an entertaining manner.

Prof. L. C. Chadwick gave an illustrated talk on "New and Worthy Woody Ornamental Plants." This talk was also given at the short course in Columbus and reported in The American Nurseryman for February 1.

Soils and Fertilizers.

Thursday morning's program opened with a discussion of "Soils and Fertilizers" by Edgar McElwee, of the department of horticulture at Ohio State University. Considerable attention was given to the importance of understanding the types of soils and their texture, organic matter and acidity. The lighter soils, because of porosity and warmth, are ideal for propagation purposes. The heavier soils are best for finishing most types, especially those that must be balled and burlapped. For the majority of ornamental plants a slightly acid soil appears to be the best. Most of the fertilizer elements are most available in soils with a slightly acid reaction.

In the discussion of fertilizers, Mr. McElwee brought out the importance of figuring the cost on the amount of essential elements they contain and not the price per ton as quoted. For example, when ammonium sulphate costs \$41.15 per ton and nitrate of soda costs \$41.50 the nurseryman is actually paying 10 cents per pound for nitrogen from ammonium sulphate and 14 cents per pound for nitrogen from nitrate of soda. Superphosphate is a cheaper source of phosphorus than bone meal. Potassium chloride is a good source of potash. Fertilizer recommendations for various kinds of ornamental plants were given.

Green Manure Crops.

Because illness prevented the presence of F. G. Haskins, his topic, "Green Manure Crops," was introduced briefly by Prof. L. C. Chadwick. This subject was discussed in preference to the scheduled "Current Nursery Problems." This desire on the part of the nurserymen strongly indicates that they have come to realize the importance of organic matter in the soil and the value of green manure as a profitable source of humus.

In the course of the discussion that followed it was brought out that leguminous crops are to be preferred where they can be grown well because of the nitrogen they add to the soil. A leguminous crop, well grown and plowed under at the right time, may add as much as 100 to 150 or more pounds of nitrogen per acre. This would be equivalent to an application of ten to fifteen

tons of average farm manure. The extent of the root system of the different green manure crops varies greatly. For example, with sweet clover as much as twenty-six and one-half per cent of the total plant is beneath the soil, with soy beans twelve per cent and with rye five per cent. To obtain good growth on poor soils it is well to add 300 to 500 pounds of a complete fertilizer, low in nitrogen, per acre. The nodules formed in the roots of legumes are not to be confused with nematodes.

New Fruits.

The afternoon session opened with a discussion of "New Fruits" by Prof. J. H. Gourley. Many standard varieties were mentioned, along with some newer types. Premier is the outstanding commercial strawberry variety, comprising about seventy-five per cent of the Ohio plantings. Fairfax and Aberdeen were recommended for trial. For currants, the Wilder, Perfection and Red Lake varieties were mentioned. Eldorado is a satisfactory blackberry variety, with Alfred suggested for trial. For raspberries the following varieties were among those mentioned: Black—New Logan, Cumberland and Blackbeauty; Red—Chief, Newburgh and Latham; Purple—Potomac. Other fruits recommended were as follows: Grapes: Blue—Fredonia and Concord, and for trial Sheridan; White—Portland, Ontario and Niagara; Red—Delaware, Brighton and Captivator. Cherries: Sour—Montmorency; Sweet—Ida, Napoleon, Black Tartarian, Bing and Windsor. Plums: Bradshaw, Imperial, Epineuse, Stanley, Italian Prune and Reine Claude. Peaches: White—Cumberland, Champion and Belle of Georgia; Yellow—Rochester, South Haven, Early Elberta and Hale Haven, and Vedette for trial. Pears: Bartlett, Wilder, Gorham and Bose. Apples: Stayman Winesap, Northern Spy, Delicious, Oldenburg, Cortland, Grimes, Jonathan and Turley, and Lodi, Milton and Macoun for trial. Crab apples: Dolgo, Whitney and Hyslop.

Mulches.

"The Use of Mulches in Nursery and Landscape Practices" was discussed briefly by Prof. Alex Laurie as the closing talk of the program. The influence of mulches on the moisture and temperature were among the points stressed. Cultivation and the formation of a dust mulch may or may not act to conserve moisture. Peat moss was recommended as a desirable summer mulch for most woody plants. Tests conducted at Ohio State University show that peat moss makes an excellent winter mulch for *Ilex crenata* and *pyracantha*. For *Abelia grandiflora* a medium mulch of peat plus a cover of straw or excelsior makes a good mulch.

Professor Chadwick closed the meeting by mentioning a few facts concerning the possibility of subirrigation for transplant beds. A hearty vote of thanks was extended to the horticulture department for arranging and conducting the school and many expressed their desire to have it become an annual occurrence.

JESSE A. SANBORN, nurseryman of Boston, Mass., is reported to have filed a voluntary petition in bankruptcy, listing liabilities of \$4,613 and assets of \$133.

ILLINOIS HIGHWAY PROGRAM.

Nearly \$500,000 will be spent in Illinois this year on a program to landscape highways.

Of this sum, \$152,000 will be paid out of the state's 1935 P. W. A. grant of \$14,000,000 for federal aid road projects, which specifies that at least one per cent must go for highway landscaping. To this Illinois will add \$200,000 of state funds for a similar program on state roads and an additional \$117,000 for maintenance of former plantings and trimming of existing trees that are dangerous to traffic.

Since 1933, when the state began its roadside development program, 113,065 trees and 168,009 shrubs from nursery stock have been planted beside state highways, in addition to thousands of woodlot trees transplanted by C. W. A. and relief workers. This spring's program includes the planting of 26,033 nursery trees, 337,350 shrubs and 7,920 vines. In all, approximately 6,000 miles of Illinois highways will be landscaped when the spring work is completed.

OREGON CONTROL BOARD.

At the annual meeting of nurserymen under the Oregon marketing agreement, the directors for the board of control were reelected. These are: Wayne McGill and John Guignard, district No. 1; Knight Pearcey, district No. 2; B. A. Mitchell, district No. 3; Roy Woodruff, district No. 4; C. E. Moyer, district No. 5; C. D. Hobbs, district No. 6.

In his report to the eighty nurserymen present, Chairman Knight Pearcey made clear that real progress had been made, that the trade was in better position than it had been in many years past, that prices were more stable and fair, that improper advertising had been practically eliminated and that the nurserymen were coöperating with, rather than antagonizing, each other.

NEW OREGON LAW.

By the adoption of house bill No. 36 and an amendment to same, Oregon has a new nurserymen's law, which has been signed by the governor.

This law does not require a bond from any nurseryman, either within the state or without, nor does it require a license from a nurseryman who lives without the state and does not maintain an office or an agency within this state. That other states will give Oregon nurserymen the same privileges as that state extends to theirs is the hope expressed by Charles A. Cole, chief of the division of plant industry.

CINCINNATI FIRM DISSOLVES.

The stockholders of Cassinelli & Brummé, Inc., Cincinnati, O., voted January 15 to dissolve the corporation and to cease business as of February 1. Peter Cassinelli will continue to operate his business as Peter Cassinelli and the Glendale Nurseries, with offices at 1507 Dana avenue, Cincinnati, and at Glendale, O. Herman Brummé will continue to operate his business as the Madeira Nurseries, on Euclid road, Madeira, O.

THE Willow Brook Nurseries, Acemac, Va., are being continued by Mrs. Thomas B. Scarborough, widow of the man who founded the business and operated it for eighteen years.

PRESIDENT WESTERN ASSOCIATION



J. FRANK JONES.

J. Frank Jones, Lawrence, Kan., president of the Western Association of Nurserymen and secretary-treasurer of the Association of Kansas Nurserymen, has from childhood been in close contact with the nursery industry. Born in Rochester, N. Y., March 3, 1880, Mr. Jones spent his early youth in a home close to one of the farms of the Ellwanger & Barry Nursery. As paper boy he served both members of the firm and at the same time made friendships with the office manager and others in the establishment, which resulted in holiday employment at the nursery.

At the close of his school days, Mr. Jones found himself in the employ of Glen Bros., Inc., Rochester, another pioneer nursery firm, as office boy. John G. Glen was senior member of the firm and E. S. Mayo, junior member, becoming sole proprietor on Mr. Glen's death.

In 1904, Mr. Jones, then 24, was asked to go to Lawrence, Kan., to enter the employ of A. C. Griesa as director of sales for the Mount Hope Nurseries. Following Horace Greeley's advice to young men to go west, Mr. Jones accepted the offer made by Mr. Griesa, first marrying the girl of his choice.

Again, in Mr. Griesa, Mr. Jones found a nurseryman of sterling qualities and was privileged to work for him for five years, at which time Mr. Griesa died. A son, W. S. Griesa, then formed a partnership with Mr. Jones to operate the business, which has been continued for the past twenty-six years under this management.

Mr. Jones is active in civic affairs. He is a charter member of the local Rotary Club, now 17 years old, having served it for ten years as secretary and for one year as president. Other profitable years have been spent in Masonic affairs; Mr. Jones has been elected to all the chairs in the Scottish rite branch and has won the degree of K. C. C. H.

News of the Trade Associations

NEW JERSEY REORGANIZATION.

Program Adopted at Trenton.

In its annual meeting, at Trenton, February 15, the New Jersey Association of Nurserymen not only went on record as favoring the general features of the revitalization plan of the American Association of Nurserymen, but voted provisions for changes in its own by-laws which would similarly put new life into the state body.

William P. Howe, Jr., chairman of the reorganization committee, read a statement regarding the association's new aims and means of accomplishing them. One was the closer coöperation with government bodies to further projects which will require the participation of nurserymen and the use of their products. An educational campaign was favored to emphasize the need of ornamental plantings and the importance of having reputable nurserymen do the work. Closer contact with existing organizations to that end and creation of a committee on public relations to further the trade's interests were unanimously approved. A sliding scale of dues was adopted, with a minimum of \$10, plus 25 cents per \$1,000 of business transacted above \$10,000.

A report was made on state nursery activities. Through the efforts of the chairman of this committee, the state department of conservation and development is preparing a new form of agreement for the use of purchasers of state seedlings, which is expected to help eliminate the evils which have existed in the past.

Two bills in the New Jersey assembly were supported, No. 159 appropriating \$25,000 for continued elm disease control and No. 160 adding strength to the plant pest law. Dr. R. P. White, reporting on the Dutch elm disease, referred to the federal quarantine since imposed and stated that New York state's enactments just made included a larger appropriation for elm disease work, on top of the \$172,000 already spent by the Empire state.

Election of Officers.

As president for the ensuing year, A. J. Jennings, of F. & F. Nurseries, Inc., Springfield, was elected, and as vice-president, William P. Howe, Jr., of Howe's Nurseries, Pennington. A. G. Kindsgrab, of St. Cloud Nurseries, West Orange, was continued as treasurer, and Robert F. Greene, Englewood, as secretary.

On the executive committee, Frank Schmidt, of J. H. Schmidt & Son, Millburn, and Paul Hoverman, of Hoverman Bros., Paramus, were elected for one year each, while Walter Ritchie, Rahway, was elected for three years.

Governor Harold G. Hoffman was a speaker at the dinner in the evening, dwelling on his program for taxation, including a general sales tax and an income tax.

R. H. Halliday, director of relief activities in Mercer county, explained that relief labor might be used in road improvement, but no provision for landscaping or planting was included in the use of relief funds. Fred Jackson, of the division of consumer information of the state department of agriculture, outlined possibilities for publicity work to be done by the nursery industry. James

Kerney, Jr., of the Trenton Times, told of the interest of newspapers in readable information about gardens and plants.

CENTRAL JERSEY MEETING.

Mayor William P. Howe, Jr., acted as host at the monthly meeting of the Central Jersey Nurserymen's Association, February 11, in the borough hall, Pennington.

Dr. C. C. Hamilton, associate state entomologist, gave an interesting talk on insects affecting nursery plants and methods for their control.

The association recorded its favor of state assembly bills 159 and 160, covering phases of the work being done to control the Dutch elm disease. Assembly bill 288, covering the licensing of florists, was voted upon unfavorably.

PENNSYLVANIA MEETING.

At the annual meeting of the Pennsylvania Nurserymen's Association, January 29 and 30, at Harrisburg, the officers were unanimously reelected as follows: President, Lester W. Needham, Weiser Park; vice-president, L. U. Straassburger, Flourtown; secretary and treasurer, Albert F. Meehan.

Stimulating talks by J. Hansell French, state secretary of agriculture; Ralph M. Bashore, secretary of forests and waters, and J. Horace McFarland evoked helpful discussion.

A. J. Jennings, of F. & F. Nurseries, Inc., Springfield, N. J., told of the plan of the New Jersey organization to improve trade conditions. This includes studies leading to the development of permanent markets, the information of all members regarding federal projects and other opportunities for the use of nursery stock, a speakers' bureau, coöperation with other state bodies and publicity to promote the public's recognition of responsible nurserymen with guaranteed business standards.

The members present reported an encouraging outlook for increased business. Rhea F. Elliott suggested that federal projects were responsible for much of the improvement and the industry must recover its normal markets to avoid a succeeding relapse.

The association went on record as favoring the revitalization plan of the A. A. N. and a scale of dues in the Pennsylvania body of \$10 plus 25 cents per \$1,000 of annual business, of which \$5 would be retained for the state organization and the balance payable to the regional and national groups.

SOUTHWESTERN PLANS.

The Southwestern Association of Nurserymen will hold its annual convention in June at the Baker hotel, Mineral Wells, Tex. Mrs. Thomas B. Foster, Denton, Tex., secretary-treasurer, asks members to let her know what kind of program they desire. Last year there was not much in the way of a general program, owing to preoccupation with the proposed marketing agreement.

President W. V. Henson, Tyler, has just appointed three committees, as follows: Legislative—W. C. Griffing, Beau-

mont, chairman; J. M. Ramsey, Austin, and Ray Verhalen, Scottsville. Convention arrangements—Gause Cannon, Mineral Wells, chairman; Otto Lang, Dallas; Mrs. T. B. Foster, and Edward Baker, Fort Worth. Program—Gause Cannon, W. V. Henson and Mrs. T. B. Foster.

The legislative committee is much interested in an effort to have the legislature remove growing nursery stock from the list of taxable property. Mr. Griffing expresses the belief that this would not only save to the trade the amount paid in taxes, but would make it possible to secure Production Credit Corporation loans against this stock as collateral.

KENTUCKY OFFICERS.

The officers elected at the meeting of the Kentucky Nurserymen's Association January 29 are as follows: President, Theodore Zollinger, St. Matthews; vice-president, M. J. Yopp, Paducah; treasurer, Nicholas Verburg, Anchorage; secretary, Alvin Kidwell, Sparta. Charles Michler, Lexington, was elected committeeman.

A summer meeting will be held in Paducah.

MARYLAND NURSERY COURSE.

The nurserymen's short course which took place at the University of Maryland, College Park, February 19 and 20 was well attended. Interesting addresses were delivered by Prof. R. W. Curtis on trees and shrubs for spring planting and by John Surtees, of Outpost Nurseries, Inc., Ridgefield, Conn., on salesmanship, illustrated with a set of cost sheets for nurserymen.

The Maryland Nurserymen's Association elected Henry J. Hohman, of Kingsville Nurseries, Inc., Kingsville, president, and Adolf Gude, Washington, D. C., vice-president. Julian J. Chisholm, II, is secretary. S. S. H.

MINIMUM PRICE AGREEMENT.

A minimum price agreement entered into by members of the Greater Cincinnati Nurserymen's Association January 28, with eighteen firms present, sets forth the minimum price at which items listed, including supplies, labor and stock, may be sold by them in the six months ending July 31 or until modified or rescinded. The prices are held to represent the approximate cost of production, and delivery costs, overhead and the customary profit may be added thereto for the selling price. Adherence to this agreement is pledged by the association members and is enjoined upon all other nursery firms in the Greater Cincinnati district in their self-interest.

WASHINGTON ADMINISTRATOR.

F. A. Wiggins, who was deputy administrator for the Washington state marketing agreement since it became effective last summer, has resigned his post. He is now traveling in the eastern states selling nursery stock. Howard E. Andrews, of Seattle, is acting chairman of the Washington nursery marketing agreement until a successor to Mr. Wiggins is appointed.

ROSE REGISTRATIONS.

Applications for registration of the following new roses have been approved by the registration committee of the American Rose Society. Unless valid objection is raised, they will become permanently registered six weeks from this date, February 21, 1935:

Peaches and Cream. Hybrid tea. Originated by Howard & Smith, Montebello, Cal., and registered by Henry A. Dreer, Inc., Philadelphia. Reported to be an unnamed seedling crossed with Miss Rowena Thom. Described as a bushy plant of a new type, bearing 3-inch globular flowers with forty to fifty petals. Color, salmon with gold and rose-pink shadings. Slightly fragrant. Promises to be popular for cutting, corsages and small bouquets. The fully open flower resembles a crested begonia.

Fluffy Ruffles. Hybrid tea. Originated by Howard & Smith, Montebello, Cal., and registered by Henry A. Dreer, Inc., Philadelphia. A seedling of Miss Rowena Thom crossed with an unnamed seedling. An upright bushy plant, bearing six to ten flowers in a cluster. Individual blooms two to three inches across with fifteen to twenty petals. Color, silvery pink with a deeper rose reverse. Somewhat similar to Salmon Spray in habit, but a better color, with the petals somewhat frilled or fringed.

Pink Dawn. Hybrid tea. Originated by Howard & Smith, Montebello, Cal., and registered by Henry A. Dreer, Inc., Philadelphia. A seedling of Joanna Hill by an unnamed seedling. Deep rose-pink buds opening to lively pink flowers of the Lady Ashtown type three and one-half to four inches across with a high center and thirty-five to forty petals. Exceedingly fragrant. A better grower, better bloomer and has a better stem than Lady Ashtown.

Eleta. Hybrid tea. Originated by Edward Dahlgren, Boone, Ia., and registered by the Kumble-Smith Co., Boone, Ia. A seedling of Sena-sal by an unnamed seedling. Described as a big plant both under glass and outdoors, with high-centered flowers three and one-half to four inches in diameter, having sixty-five or more petals. Color, clear rose-pink. Moderately fragrant. Color does not fade in dark weather and the foliage is resistant to mildew and black spot.

Grand Canary. Hybrid tea. Originated by Ahner M. Lowman and registered by the United States Cut Flower Co., Elmira, N. Y. A sport of Token. Vigorous upright plant with semiglossy foliage, making plenty of breaks and producing medium, long pointed, greenish yellow buds, which open to full high-centered flowers three to three and one-half inches across with twenty-four to twenty-seven petals. Color, Pinard yellow. Moderately fragrant. Similar to Token in form, shape and growth, but different in its clear canary-yellow color.

San Diego. Hybrid tea. Originated and registered by Forrest L. Heatt, San Diego, Cal. A seedling of Shot Silk by Mrs. C. W. Edwards. An upright bushy plant with glossy foliage, ovoid buds; flowers three to four inches across with thirty-five petals. Color, deep orange shading to apricot, fading to soft buff. Fruity fragrance. Similar to Shot Silk, but blooms three times as long and has longer stems with better cutting value.

Chieftain. Hybrid tea. Originated and registered by the Montgomery Co., Hadley, Mass. A seedling of Hadley by Tallman. Upright plant, with large heavy foliage, vigorous free growth, medium pointed buds and large high-centered flowers with thirty-five petals. Color, velvety red with yellow base. Moderately fragrant. Similar to Hadley, but brighter red, freer from mildew wood, more vigorous and more resistant to disease.

Dixie Climber. Climbing hybrid tea. Originated by A. F. Watkins and introduced by the Jackson & Perkins Co., Newark, N. Y., and the Dixie Rose Co., Tyler, Tex., jointly. This rose is a sport of the hybrid tea, Governor Alfred E. Smith, which it resembles in all respects except that it is a vigorous climbing rose. Reported to be superior to most climbing hybrid teas because of its prolific and continuous bloom.

Texas Centennial. Hybrid tea. Originated by A. F. Watkins and registered by the Dixie Rose Co., Tyler, Tex. A sport of President Hoover. Deep brick red buds open to flowers of the same color with a suspicion of gold; center of the bloom is lighter red toning to dark pink with age. Similar to President Hoover in growth and in color not unlike Mary Hart, but superior to both in purity of color and vigor.

Queen Louise Boren. Hybrid tea. Originated by J. H. Nicolas and registered by the Dixie Rose Co., Tyler, Tex. A seedling of (Emile Charles by La France) by Marechal Niel. A large flower of the hybrid perpetual type with typical hybrid tea foliage, free growth and bloom. The globular flowers are five to five inches across with 100 to 125 petals. Color, luminous pink with a glint of salmon. Intensely fragrant, resembling both La France and Marechal Niel in that respect.

Gloaming. Hybrid tea. Originated by J. H. Nicolas and registered by the Jackson & Perkins Co., Newark, N. Y. A seedling of Charlotte Kilham by Mrs. Pierre S. du Pont. Vigorous and bushy plant, with long pointed buds and globular flowers four inches or more in diameter, averaging sixty to seventy-five petals. Color, salmon pink, with orange markings at the base of the outer petals. Similar to Los Angeles, but a better plant with stronger stems.

Shenandoah. L. C. Originated by J. H. Nico-

las and registered by the Conard-Pyle Co., West Grove, Pa. A seedling of Etoile de Hollande by Schoener's Nutkana. A climbing rose, growing ten feet or more high, with long pointed buds and semidouble flowers four inches across with seventeen petals. Color, crimson. Strong old rose fragrance. Resembles a climbing Etoile de Hollande, but is harder than the climbing sport of that variety.

Climbing Robinow. Climbing hybrid tea. Originated by Peter Lambert, Trier, Germany, and registered by the Conard-Pyle Co., West Grove, Pa. A sport of Hermann Robinow. Plant is a semiclimber, growing six feet high, bearing clusters of 3-inch flowers with from twenty to twenty-five petals. Color, silvery white deepening to pink with a golden base. Spice-like odor. Intermittent bloomer all season. Somewhat like climbing Mme. Butterfly, which it exceeds in hardness and quantity of flowers.

Mrs. Fred L. Lainsom. Hybrid tea. Originated by Peter Scitline and registered by Fred L. Lainsom, Council Bluffs, Ia. A sport of Tallman, which it resembles in all respects, except that it has a fuller center and the color is a dark deep velvety pink, almost red, with a yellow base and bronze and burnt orange tints on the outer surface of the petals. The originator claims it is an improved Tallman, with heavier buds and brighter and richer color.

Texas Gold. Hybrid tea. Originated and registered by Wolfe the Florist, Waco, Tex. A sport of President Herbert Hoover, which it resembles in growth, freedom and form of flower, but the color is pure gold yellow tinted with a little pink on the outer petals when grown under glass in the winter.

Jasmine. Hybrid tea. Originated by J. H. Nicolas and registered by the Jackson & Perkins Co., Newark, N. Y. A seedling of (Radiance by Golden Emblem) by (Mrs. P. S. du Pont by Dr. E. Kener). A robust bushy plant with flowers somewhat resembling Radiance in form, opening from deep orange buds to salmon-tinted blooms overlaid with yellow, deeper on the inner surface. Particularly noted for its free and steady blooming quality and its unusual jasmine-like perfume.

Helios. Hybrid tea. Originated by M. Leander & Co., Steyl-Teigen, Holland, and registered by the Jackson & Perkins Co., Newark, N. Y. Reported to be a seedling of unnamed seedlings. Bushy compact plants of bedding habit, having cupped flowers three to three and one-half inches across with fifteen to twenty petals. Of a striking homogeneous deep yellow shade. Mildly fragrant.

Carillon. Hybrid tea. Originated by J. H. Nicolas and registered by the Jackson & Perkins Co., Newark, N. Y. A seedling of Charles P. Kilham by Mrs. P. S. du Pont. Compact plant of bedding habit, with glossy foliage. Scarlet orange buds open to loosely formed semidouble flowers four inches across with twenty to twenty-five petals. The open flowers are flame-pink, producing an extraordinarily brilliant color effect in mass plantings.

Golden Charm. Hybrid tea. Originated and registered by Groshen & Morrison, Rome, Pa. Sport of Tallman, which it resembles in all respects, except that the flower is golden yellow and has a stronger growth, with darker glossier foliage.

Peon. (Lawrenceana). Originated by John de Vink, Holland, and registered by the Conard-Pyle Co., West Grove, Pa. A seedling of Rosa Roulettil, with tiny flowers on a dwarf gray green bush. Blooms, deeper in color than Rosa Roulettil and about one inch across with twenty or more tiny petals.

Ruth Shamburgh. Hybrid tea. Originated and registered by C. S. Shamburgh, Winona, Tex. A sport of Kirsten Poulsen, which it resembles, except that the flowers are a soft light shade of pink.

G. A. Stevens, Sec'y.

TWO ROSES PATENTED.

According to Rummler, Rummler & Woodworth, Chicago patent lawyers, the following new plant patents were issued February 19, 1935.

No. 121—Rose. Ruth Kaucher, Newton, Pa. A variety of hybrid tea rose characterized particularly by its vigorous growth, free-blooming habits and large, long-lasting flowers, having flesh pink centers and white outer petals with touches of pink and having a unique raised cone-like structure in the central basal portion of each flower.

No. 122—Rose. George C. Thomas, Jr., deceased, Beverly Hills, Cal., by Josephine Moorhead, Thomas Gardner and George C. Thomas, III, Beverly Hills, Cal., executors, assignors to Armstrong Nurseries, Ontario, Cal. A variety of dwarf polyantha rose characterized particularly by its single, silvery white clusters of flowers continuously produced, its glossy evergreen foliage and other desirable qualities.

AMERICAN NURSERYMAN

KELSEY BACK FROM TRIP.

An interview with F. W. Kelsey, president of the F. W. Kelsey Nursery Co., New York, was published in a recent issue of the Miami, Fla., Daily News on Mr. Kelsey's arrival in Miami after a three months' journey to parts of South America and Africa. While admiring the bougainvilleas in Miami, Mr. Kelsey told the interviewer that he had seen bigger and finer specimens in Portuguese East Africa.

The traveler sailed to Africa from Rio de Janeiro, Brazil, stopping off at St. Helena to see the house occupied by Napoleon during his banishment. From there Mr. Kelsey went to Cape Town, Africa's oldest city, a metropolis of 40,000 inhabitants, most of them English. The city is modern in many respects, Mr. Kelsey stated, but he did not care for the heavy gales that frequently sweep the city.

From Cape Town, visits were made to Victoria Falls, Johannesburg, Kimberley and Pretoria. The falls, higher than those of Niagara; the gold mines, and the diamond mines were all exceedingly interesting, Mr. Kelsey reported. The Kruger national park was another objective, and Madagascar was also made a part of the itinerary. Zanzibar, an Arab city, drew some favorable remarks from Mr. Kelsey, but Cairo, Egypt, failed to arouse his enthusiasm beyond the fact that it is the approach to the pyramids and is close to the Nile.

OREGON ROSE NURSERY.

Ralph Johnson, manager for Mountain View Floral Nurseries, Inc., with plantings near Troutdale, Ore., anticipates an unusually fine business in nursery stock the coming season, partly because of the drought through the middle west last year.

The plantings are along the Baseline-Columbia River highway and the structure housing the office and display room is situated at a bend in the road. Last summer about 25,000 persons visited the nurseries and in previous years the visitors sometimes numbered 75,000. Nearly 100 acres are planted to rosebushes and evergreens. There is a greenhouse near the office for the propagation of stock.

The nurseries are owned by the Jacob Feser estate and for several years John Carlson has been nursery foreman. Twelve persons are regularly employed and many more in the busy seasons.

BRIEF PRUNING GUIDE.

"Secrets of Success in Pruning" is the title of an attractively printed illustrated booklet prepared for distribution this season by Seymour Smith & Son, Inc., Oakville, Conn., manufacturer of a comprehensive line of pruning tools. Concisely and competently written, the publication will doubtless be welcomed by all planters for the information thus made available. A charge of 10 cents is made for the work.

In addition to preliminary remarks explaining the purposes of the booklet, there are seven chapters, totaling about forty pages, giving pointers on the pruning of different classes of material, such as trees, shrubs, vines, evergreens, roses, etc., as well as hedge and border pruning. The final chapter is devoted to a discussion of tools useful for pruning.

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Possible Solutions of Trade Problems

L. C. Chadwick Discusses Outstanding Ills of Industry and Points Way to Remedies Available Through Organization

The many conventions of the past two months have brought to the attention of nurserymen many vital questions concerning their industry. Some of these questions have been discussed in detail by nurserymen large and small, to the extent that minor differences have been ironed out, and they now seem fairly applicable to the nursery industry as a whole. Such is the case with the Costich revitalization plan for the American Association of Nurserymen. There is no doubt that a national organization which includes less than six per cent of the concerns engaged in the industry cannot truly represent it. Since the average nursery contains but about twenty acres, many more of the smaller nurserymen should be included in the national organization. Taxation, quarantine problems and others are as vital to them as to the larger concerns. The revitalization plan is a means of obtaining a more equal representation, and may we hope that the committee can report a logical procedure to follow at the next national convention.

Other problems, perhaps just as important to the welfare of the industry, have been presented at state conventions. The possibility of solving such problems, or at least an endeavor to derive from them fundamental facts, is perhaps best obtained by an expression of opinion of those interested. It appears to me that an ideal place to express these opinions is in the trade papers and that much could be gained by a frank discussion of them on the part of more nurserymen. Such discussions may bring to light facts upon which state and national organizations can base a program to better the industry. I should like to express a few thoughts on some of these problems at this time with the hope that some nurserymen will do likewise.

Minimum Prices.

The problem of minimum prices is one of long standing. It has been discussed pro and con at many meetings, but little has been accomplished. It has often been considered impossible to set minimum prices. Perhaps the failure of the marketing agreement proved this to be true from a national standpoint. Even in the face of this, it does not appear to be impossible to establish a fair minimum price on some items and perhaps within local organizations. I believe this has been done in some cases by wholesale fruit stock producers. Why would it not be possible for the wholesale rose growers to do likewise? The number of these specialized growers within definite regions is not so great but that they could get together around a table and come to some conclusion as to what constitutes a fair minimum price. Nurserymen in such an assembly must be willing to give and take, but in the end such co-operation will mean a stimulus to their business.

It would appear to me that the place

to start is in the wholesale trade and to limit the minimum prices to a few major items at first. From this it might work into a greater range of materials and even to the retail trade. From the retail standpoint it would seem quite possible to accomplish something with small organizations. Take, for example, a local organization of nurserymen and landscape planters who supply a large percentage of stock sold in some city. These retailers might well get together on some minimum prices which would mean better business for everyone. There is no doubt that many consumers feel that nurserymen as a group will readily cut prices. This is an unfavorable condition, since as long as this feeling exists, there can be little hope of obtaining prices that will net the nurseryman a fair and legitimate profit.

Another case at hand is the purchase of nursery stock by state and federal governments for highway planting or otherwise. Currently the number of nurserymen bidding on these contracts within any one state is comparatively small, yet the bids are so variable that it is astonishing.

The specifications for this stock are now quite carefully set by the purchasers, and if they are enforced, the quality of stock cannot vary a great deal. Would it not be possible, with these specifications at hand, for the bidding nurserymen to get together on fair prices? The fact that other contractors can get together and agree within a few dollars on bid prices would seem to point to the fact that nurserymen could do likewise if they so desire.

Grading Practices.

At one of the recent conventions was shown clearly the variation that exists in grading practices, or at least the variation that exists in plants that are sold under established grades. Standard nursery grades have been established that fulfill the needs of the industry fairly well. From the discussions that have ensued at various conventions it would not appear that there is a need for much revision in these standards. Rather there is a need for closer adherence to the grades now established. When the plants vary a foot or more in size when the order calls for an 18 to 24-inch shrub, it is not the fault of the grade. In the end the customer usually gets what he pays for, and misrepresentation is bound to reflect upon the seller's business. Shady business practices on the part of a few concerns reflect upon the whole industry and should be combated in every way possible. Advertise the fact that American nursery standards are followed and then abide by them.

Plant Names.

Much discussion has been raised in the past few years regarding plant nomenclature. The volume "Standardized Plant Names" was provided to fill a definite need and has accomplished this fairly well. Truly enough, we are now

in need of a careful revision to give us a more definite standard to follow, but until this is accomplished all nurserymen should endeavor to name their plants as correctly as possible. Variations will always exist, as in cases of unofficially named species and varieties. Nurserymen should guard against this in all possible instances, as it is very confusing for the buying public, unfamiliar in many cases with plant names, to find the same plant listed in trade catalogues under two or three different names. Substitutions should not be practiced unless called to the attention of the purchaser.

Recently cases have appeared where the same or very similar plants are offered by the trade under different names. Such is the case with *Chrysanthemum amena* and the *Crimson King* Carnation. At least three names exist in the trade for each of these plants. These names have been given as, perhaps, more appropriate to the plant and as merchandising aids. Such plants are described in such glowing terms that the consumer is almost compelled to buy. But what a shock he has when the plants arrive under the different names and they turn out to be the same thing! These different names may have been given because in some nursery a deeper color or greater hardiness appears to have resulted. If these minor differences have been adequately checked in different localities, there may be some justification for the new name for the variation, but until this has been carefully checked it is best to abide by the original name.

The testing of plant types would appear to be a policy in which state universities could well aid the nurserymen. If a number of the universities within the region in which the nurserymen reside could test plant types for a period of a year or more and make a favorable report as to cultural or anatomical differences the nurserymen would then be justified in merchandising a new plant.

At this point it might be well again to mention two conditions which I have stressed before. One of these is the possibility of nurserymen's limiting their trade lists to fewer species and varieties. There is no question that nurserymen carry in their lists a good many plants that are much inferior to other existing types. It would seem to me possible for regional groups of nurserymen to come together and agree to drop some of these inferior types and place more emphasis on the better materials. Possibly a supplementary list of a few of the older types could be prepared to meet the occasional demand until the newer and better plants become established.

The other possibility is the establishment of a registration bureau which would have the power to test, and approve or reject, new woody ornamental plants as they are produced by nurserymen or gardeners.

Such a bureau might not be able to prevent the plant's being produced if it were rejected, but it would act in establishing a list of accredited plants which could be looked upon as reliable by the consumer.

The Current Season

W. N. Craig's Notes from New England

MILDER WEATHER.

As February nears its end, we find that while the month has been a moderately cold one, only thrice has the temperature fallen to zero, as compared with thirteen times a year ago, when the month broke all records for cold in the history of the Boston weather bureau. Apart from the great blizzard of January 23 and 24, the snowfalls have not been heavy. The thick snow mulch has been excellent for vegetation, more especially herbaceous perennials, which ought to come through the winter in good shape. Even though the cold has been less intense, judging by reports coming in, there is evidently going to be a good deal of winter killing and browning again. It is, of course, too early to estimate what this is going to be. The destruction of flower buds on deciduous shrubs is trifling yet, while the hybrid rhododendrons, which surprised us by coming through the terrible winter of a year ago with a large proportion of their buds unharmed, are so far all right and are proving much harder than we had given them credit for. While we in the eastern section of North America are and have been ice and snowbound for a long time, Great Britain has not had so balmy a winter in a generation, the Netherlands has had hardly any frost and bulbs are more advanced than for years and in Oregon and many other states vegetation is far earlier than usual.

THE SPRING OUTLOOK.

Catalogue requests to date have been good, although several nurserymen report that advance orders are not so numerous as might be expected. No doubt the cold weather has much to do with this. Patrons are not fired with enthusiasm when ponds are covered with twenty-four inches of ice, when frost below the snow mulch is deep and when they see bays and harbors still in the grip of the ice king, but as days steadily lengthen, the sun's rays grow stronger and snow and ice slowly disappear, a better feeling will prevail. We can reasonably anticipate, I think, rather better business than a year ago, even though there persists a lamentable lack of confidence in the future. The only thing we are pretty certain of seems to be increased taxation.

The question of prices is a rather crucial one. These ought to average higher, and will in many lists, but there seems likely to be more of the senseless price-slaughtering which has degraded the business the last few years. Some states are setting an example which those in the east might emulate with profit. In Oregon, for instance, where last year perennials were sold on the public market at 5 and 10 cents apiece at retail, the nursery interests have secured a marketing agreement under their state enabling act which will have a tendency to hold up prices. This year 15 cents will be the minimum price at retail and 10 cents the wholesale minimum. The nurserymen there have also done away with the quoting of cheap prices in newspapers and magazines, as well as over the radio. With prices of most other commodities going up, the grower should be able to demand more for his goods. He will be just as well off if

he grows fewer plants but gets more for them. In Oregon, also, a new nurserymen's law has recently been passed which puts teeth into the enforcing act as well as increasing the licensing fee on the larger growers. The producers there, thoroughly sick of the era of price-slaughtering, mean to insist on the law's strict enforcement and to drive out all chiselers and dead beats. More power to them, and may many more states follow in their footsteps!

MORE PERENNIALS OF MERIT.

The new dwarf asters of English origin which I first had the pleasure of seeing abroad in 1933 are evidently going to be one of the leading novelty sellers this season. They make a welcome addition to our list of asters, which is a steadily growing one. The raiser worked several years to evolve a race of hardy garden plants for use on the graves of the 750,000 British soldiers who are sleeping on French soil. We shall find such varieties as Victor, Marjorie, Lady Henry Maddocks, Countess of Dudley, Ronald and Nancy excellent for use either in the perennial border or rock garden. Of novel-belgii habit, these are among the best introductions of the year. Incidentally, is it not strange how our hybridizers neglected the native asters of our fields and roadsides and that it was left to the Europeans to work on them and send us back nearly every variety we are growing? One of the few exceptions is Skylands Queen, raised by the late Thomas H. Winskill, at Skylands Farm, Sterlington, N. Y.

How greatly, too, we have neglected the wealth of our native pentstemons, many of which have come to us via Europe either in the form of plants or seeds!

In the extensive campanula family are a host of splendid garden plants. Among those rather new or but little known yet are Miranda, also called Bellardii Miranda. It produces mats of pretty foliage, from which rise great numbers of silvery blue bells not over three inches in height and persisting a long time. It suggests pusilla, but is a much better and more dependable grower. The variety Poscharskyana is another fine addition, resembling gargarica in habit, but much more vigorous and producing large flowers over a long season. Muralis, also listed under the less easily pronounced name of Portenschlagiana, makes dense tufts of foliage from which rise rich blue bell-shaped

AMERICAN NURSERYMAN

flowers on 6-inch stems. Of the more robust campanulas for use in the borders, nothing in my estimation equals lactiflora, once it is established and attaining a height of five to seven feet, with immense heads of large pale blue flowers. This old variety is not so much grown as its merits deserve.

The helenium family is a useful one. Hoopesii blooms quite early in summer, but most of the varieties come in season from August onward. In addition to the robust but useful autumnale superbum, there are other varieties of more recent introduction which are splendid garden plants. The varieties Riverton Gem and Riverton Beauty are both useful. Crimson Beauty and Moerheimi Beauty are rather new; both have larger and more richly colored flowers than any others of this genus. I consider Moerheimi Beauty superior to all others seen abroad; the rich crimson flowers, carried on large heads, are outstandingly beautiful and it is easily one of the finest novelties sent out in recent years. Stocks of this are still quite limited in America, however, as it does not increase so readily as other varieties.

MECONOPSIS BAILEYI.

The blue Thibetan poppy, as this interesting plant is popularly called, seems to have a fascination for many plant lovers. While few in the east even succeed in making it grow, much less flower, there are always many calls for it each spring. Most of the seeds sold are of too ancient lineage to germinate, but really fresh seeds will germinate in from two to three weeks in a warm house. These can go into shallow flats of soil containing a generous proportion of either peat moss or leaf mold with plenty of sand added. Later these can go into 3-inch pots and gradually be hardened off so that they can be planted out early in June. Plants must have considerable shade, such as is afforded by overhanging deciduous tree branches. The soil should be rich in humus and well drained, and during hot weather a mulch is desirable, as well as occasional waterings. It is utterly hopeless trying to grow this flower in full sun; plants will simply burn up in a short time. With overhead screens it can be grown, but even then not easily. Some growers are flowering it in Massachusetts, and rather more in Maine, where nights are much colder than here in summer. It is really a biennial, although occasionally plants prove to be perennial. The best plants I have seen here average twenty-four inches in height, but it can be grown much taller. The finest plants I have seen were on a large private estate in the west of Scotland, where in early August they were over six feet high

BOUNTIFUL RIDGE NURSERIES

Box O, PRINCESS ANNE, MARYLAND

OFFER: PIN OAKS, 3 to 6 ins. in diameter, 15 to 20 ft. high, specimen stock. NORWAY MAPLE, in all grades. ROCK MAPLE and SILVER MAPLE. Beautiful AMERICAN ARBOR-VITÆ, specimen trees 15 to 18 ft. AMERICAN HOLLY, nursery-grown, 3 to 8 ft. high. PYRAMIDAL ARBOR-VITÆ, sheared, 3 to 4 ft. PFITZER JUNIPER, 4 to 5-ft. spread. COLORADO BLUE SPRUCE, 3 to 4 ft. DOUGLAS SPRUCE, 3 to 6 ft. MAGNOLIA GRANDIFLORA, 4 to 8 ft., and many other greens, RHODODENDRONS, etc., especially suited for large estate and park planting. Very attractive prices on this material will be made. Inspection invited.

and still flowering, with seedlings coming up in thousands all around. These were growing in prepared beds in an open glade in woodland, where large oaks and beeches gave the necessary shade. I saw them in other places doing well, but scarcely so robust. In 1933, at the Royal Horticultural Society's gardens at Wisley, in Surrey, they stood five to six feet high; these were also in woodland, with *Lilium giganteum* over twice their height near them and the robust *Primula florindae* four to five feet high growing in hundreds along the sides of the waterways. There are many other meconopsis, but I doubt if we shall be able to do much with any of them except, possibly, along the Maine seacoast or in Oregon, Washington and British Columbia, where climatic conditions are more to their liking.

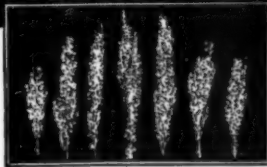
THE SPRING FLOWER SHOWS.

The great spring flower shows mean a great deal to the nursery interests. There will be no fewer than eleven of these big exhibitions during March and early April, in such cities as New York, Chicago, St. Louis, Detroit, Boston, Philadelphia and Omaha. One or two of these shows will draw attendances of about 200,000 each, and several more will total well over the 100,000 mark. It is conservative to estimate that over 1,000,000 people will view the different exhibitions, which is a truly marvelous showing. This shows the tremendous increase in the interest in things horticultural in the past few years, and although we are now entering the fifth year of the depression period, it is pretty safe to say that, barring inclement weather and unforeseen political black clouds, 1935 will make a new record in attendances. Formerly it was the automobile, sportmen's, home beautiful, food or other exhibition which drew the crowds, but today flower shows have put each and all of these in the background.

These great horticultural exhibitions mean much to the nursery interests. The visitors, who are growing more and more garden-minded, and in many cases also more critical, are those who are going to buy our products. It is not surprising, therefore, that nurseries in increasing numbers, in spite of present rather discouraging trade conditions, are finding the shows one of their best advertising media. It is expensive to devote glass area to the forcing of material to be used, space which really ought to be used for increasing stock for spring sales, but the experience gained by those who have exhibited in the past is that it has paid well—unless the exhibitors have stuck to stereotyped displays, which never pay.

Even though nurserymen do not exhibit, they can ill afford to stay away from these shows. With notebook in hand, they will secure data and ideas bound to be of great value in their business. Too many of us are content to stay at home and let others do the work and reap the rewards some of which might well be ours. Apart from the great Chelsea show in London, England, which is unquestionably the most varied and outstanding of its kind in the world, almost all other great exhibitions abroad are staged in the summer months and usually under canvas. British shows have sliding scales of admission prices, highest at the opening and declining toward the end, when exhibits are less fresh. Some such system might well be introduced here, as those who visit an exhibition which has been staged for

A Scientific Triumph! TRUEHEDGE COLUMNBERRY



U. S. Plant Patent No. 110

Actual picture of 2 year 18 inch branches showing unique branchlet character. Note that every tiny weak lateral is perfectly erect

A ready-made hedge when planted! Practically no trimming is necessary. Saves

you 2 to 3 years work and waiting for hedge effect. Truehedge is cheaper in the long run, superior in beauty, has better foliage, is perfectly hardy, drought resisting and rust immune. Will displace tender by-gone hedging.

Forms individual "Accent Spires" and trimmed shapes resembling Boxwood.

The greatest plant success of a decade. Proved by the fact that over 150,000 plants have been sold, with practically no advertising, since introduction in New York last July.

WHOLESALE PRICE LIST

(*Berberis Thunbergii Pluriflora Erecta*)

	Per 10	Per 100	Per 1000
9-12 in.	\$2.00	\$14.00	\$120.00
12-15 in.	2.50	19.00	165.00
15-18 in.	3.00	24.00	220.00
18-24 in.	3.50	30.00	275.00
24-30 in.	4.50	40.00	350.00

5 to 25 will be furnished at the 10 rate; 25 to 250 at the 100 rate; 250 or more at the 1000 rate. (Packing additional.)



Average 1 year old TRUEHEDGE plant without trimming

Average 1 year old Common Barberry plant without trimming

WHEN you may have Columnberry Hedging

WHY consider old-time Barberry

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Adams Nursery, Inc., Springfield, Mass.; Bay State Nurseries, Framingham, Mass., and North Abington, Mass.; Stephen Hoyt's Sons Co., New Canaan, Conn.; Jackson & Perkins Co., Newark, N. Y.; R. M. Kellogg Co., Three Rivers, Mich.; Storrs & Harrison Co., Painesville, Ohio. Stock will be available at the above nurseries for the prices shown in this adv. from

THE COLE NURSERY COMPANY

Introducers of Truehedge Columnberry

Painesville, Ohio

Established 1881

New Spring Trade List and Surplus List on Request.

a week are bound to see plenty of shabby displays in spite of all efforts of the management to keep them freshened up.

NUT IMPROVEMENT.

In spite of the unquestioned popularity of nuts, particularly hickories and walnuts, nut growing in New York is for the most part in the same state of development as was apple growing more than a century ago, according to a recent release by Prof. G. L. Slate, pomologist at the experiment station at Geneva. "Seedling trees are the rule and, from the standpoint of efficient production, these are no better than seedling apples, plums or cherries," states Professor Slate.

Grafted varieties of nuts are as superior to the average seedling nut tree as the Baldwin or McIntosh apple is to the average seedling apple tree, says Professor Slate, adding that the superiority is chiefly in such characteristics as size of nut, thinness of shell, ease of cracking and size and quality of kernel. Recent developments in black

and English walnuts and hickories are briefly discussed in the article.

Progress in the improvement of filberts is also touched upon, more than 100 varieties of this popular nut now being on trial at Geneva. Hybrids between the native hazel and certain filberts are receiving special attention, with the Bixby and the Buchanan deserving trial. Professor Slate is the author of a bulletin on filbert growing, a copy of which can be obtained upon request to the station.

WITH 500 shares, no par value, Blakely's Nurseries, West Palm Beach, Fla., have been incorporated. S. J. Blakely, J. C. Bills, Jr., and L. B. Miller are directors.

THE retail sales yard at 200 West Arbor Vitae street, Inglewood, Cal., of Moore's Nursery was lately sold to E. C. Matson, who has been in the landscape business at Inglewood for about five years and who was before that associated with S. R. Moore. The latter is continuing to produce bulbs and flowers for the wholesale trade.

Perennials to Propagate

Gabriel Simon Writes on Plants
Deserving Nurserymen's Attention

KOREAN HYBRID MUMS.

Known the world over for its hardy native flora, Korea has given us, among other things, *Chrysanthemum coreanum*, a species that has proved of great value for breeding purposes because of its iron-clad hardness.

From this sturdy native of Korea, plant breeders have developed a new race of hybrids, a distinct type that has added new color, new interest and real hardness, so that it is possible to grow chrysanthemums in sections where winter killing has been a serious problem. Most of the other types which we have grown for years have given us much disappointment the past two seasons because the early frosts ruined the flowers before they had a chance to open.

Briefly, these new creations are better than the older type because they are hardier, more attractive and branching in growth and just as easy or easier to grow. The lovely pastel-shaded blooms, which defy an accurate description or true color reproduction, resemble the flowers of the gerbera in daintiness. Cut with short stems, these chrysanthemums make charming table decorations, yet are capable of striking decorative uses if the entire branching sprays are used. They will prove valuable for artistic cut flower arrangements, afford marvelous fall color effect in the perennial border or rockery and have a possibility of being used as pot plants.

So far, one of the best of these, namely Mercury, has been patented (plant patent No. 58). The well formed single flowers, two to three inches across, open bronze red and change to coppery bronze as they mature and give a charming effect in the garden. This plant grows about two feet high and blooms through the latter part of September. It holds up well as a cut flower, as do all in this group.

Apollo, a good autumn color, is a combination of bronze, red and gold suffused with a glowing salmon. The single flowers, two inches across, are produced in large sprays about two and one-half feet high. This variety has a long season of bloom because it resists frost exceptionally well.

Ceres is a lovely combination of old gold, chamois-yellow and soft coppery bronze. The mature flower petals appear as if dusted with gold. The flowers are single and numerous on well branched sprays.

For those who prefer depth and brilliancy of color in the garden, Mars surely has a place. It is deep amaranth red, changing to wine red overlaid with a velvety sheen. It grows from two to two and one-half feet high.

Diana is a Chateaufort rose pink mingled with lilac rose and soft salmon. The triple rays of petals give an appearance of fullness that is nothing less than dainty. It is two feet high.

Daphne is a new shade of pink chrys-

anthemum. It is an exquisite blending of Daphne pink with an underlying sheen of lilac rose, enhanced with prominent golden stamens in the center. The single flowers three to three and one-half inches across carried in graceful sprays are especially frost-resistant.

Undoubtedly other shades equally good will be developed in this strain in the near future, and they will go a long way in replacing those chrysanthemums which have not been real hardy.

DAPHNE CNEORUM.

Daphne Cneorum, rose daphne, or garland flower, one of the most charming evergreen shrubs in cultivation, a native of the mountains of Europe, has found its way into more of our American gardens in the past few years than ever before. It is only recently that nurserymen have learned how to propagate it successfully and can offer it to the trade at reasonable prices.

This variety is sometimes considered a perennial plant, but it is really an evergreen shrub, growing twelve to fifteen inches high and as much as two feet across. During May and June, when at its best, it is covered with clusters of bright pink blooms, as sweet and deliciously scented as trailing arbutus. A few scattered flowers appear all summer long, even until heavy frosts late in the fall.

D. Cneorum thrives best in full sunshine in a rich, well drained sandy loam. Failures of this plant are due largely to heavy, wet soil, shade or exposure to a wind-swept area. Besides

AMERICAN NURSERYMAN

being an excellent plant for the rockery, it is exceptionally good for foundation planting in front of evergreens or azaleas, or as a border plant.

D. Cneorum may be propagated successfully in several different ways. Cuttings taken from forced plants in the greenhouse early in the spring or cuttings from mature wood during the summer or late fall, placed in a partly closed frame or case free from drafts, have given us good results. Propagation may also be by mound-layering; that is, the soil is pulled up around the plant in the spring, covering the lower portion of the branches. By the following spring these will be well rooted and may be cut off and planted.

SHIPMENTS east of rosebushes by the Western Rose Co., Van Nuys, Cal., are expected to total 1,000,000 plants this season. Two brothers, Albert B. and T. J. Morris, are sole owners and operators of the company.

P. V. MATRAIA has moved his nursery from Junipero Sierra boulevard to Hillside boulevard and Sylvan avenue, Colma, Cal., and has changed the name from the Balboa Nursery to Bay Meadows Nursery, Inc. The new location gives Mr. Matraia room for necessary expansion.

TAXUS CUSPIDATA CAPITATA

THE ONLY HARDY UPRIGHT YEW
Should supersede Arbor-vitae for hedge purposes

AZALEAS (Evergreen and Deciduous)

MAGNOLIAS Large Flowering

RHODODENDRON HYBRIDS

and other scarce items.

Send us your list of requirements with full particulars as to quantities, varieties and sizes.

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Rutherford, N. J.

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Write for a free
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Sent to the trade only.

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Philadelphia, Pa.

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OUR PITS COMPARE FAVORABLY
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Send for Free Catalogue
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New York City Chicago, Ill.

EVERGREEN TREES

	Per 1000
Mugo Pine, 5-yr., TT. 6 to 9 ins.	\$18.00
Douglas Fir, 4-yr., T. 4 to 8 ins.	18.00
White Spruce, 5-yr., TT. 6 to 12 ins.	18.00
Colorado Blue Spruce, 4-yr., T. 4 to 8 ins.	30.00
Balsam Fir, 4-yr., TT. 3 to 5 ins.	20.00
250 of the same kind and size at the 1000 rate.	
Many varieties of seedlings at \$5.00 and \$6.00 per 1000. Ask for price list.	

Western Maine Forest Nursery
Dept. AN Fryeburg, Maine

NORWAY MAPLE

	Straight and Well Rooted.	Per 10	Per 100
8 to 10 ft.	\$7.50	\$ 65.00
1 1/2 to 1 3/4 in. cal.	8.50	75.00
1 3/4 to 2 in. cal.	12.50	100.00
2 to 2 1/2 in. cal.	17.50	150.00
2 1/2 to 3 in. cal.	25.00	200.00

Write for quotations on other varieties of Shade and Ornamentals. 10% discount car lots.

TITUS NURSERY CO., Waynesboro, Va.

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HERBST BROTHERS, Inc.

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CATALOGUES RECEIVED.

[In writing for a copy of any of the catalogues reviewed below, please mention that you saw it described in *The American Nurseryman*.]

Felix Gillet Nursery, Nevada City, Cal.—A 26-page nursery catalogue of nut and fruit trees and ornamentals, including deciduous and evergreen trees, shrubs, roses, etc. Fountain and silver-leaf chestnuts are among the novelties. It is the firm's sixty-fourth year of business.

Krider Nurseries, Middlebury, Ind.—A mail-order catalogue consisting of fifty-four pages and a cover printed in four colors. It is especially interesting for the variety of stock offered and for the many references to the plantings made by the firm at A Century of Progress, Chicago, last year. Throughout the book appear large reproductions of these gardens, accompanied by descriptive notes and suitable verses by Vernon Krider. There are considerable cultural data to assist the gardener. Among the featured items are plants that have been in the fair gardens, an extensive list of roses, phloxes, fruit stocks, blue hydrangeas and grafted evergreens.

McConnell Nursery Co., Port Burwell, Ont.—1935 edition of "Hardy Plants for Canadian Homes," consisting of fifty pages on which appears a comprehensive selection of garden material with numerous illustrations. A selected strain of upright barberry for hedge use is featured as Truehedge Columberry. The establishment contains about 135 acres, of which over 100 acres are planted to trees, shrubs, plants and bulbs, it is said.

Tingle Nursery Co., Pittsville, Md.—Wholesale price list of lining-out and specimen stock. Specialties are azaleas, including U.S.D.A. varieties and Arnoldiana originations; boxwood, rhododendrons and strawberry plants. There is also a substantial list of hardy perennials. Despite curtailed plantings, it is said, the firm sold more lining-out stock last spring than in any previous season.

Farmers' Seed & Nursery Co., Faribault, Minn.—A general catalogue of seeds for vegetable, flower and field crops. Portraits of J. Kleenapp, president and general manager of the firm, and associated officials appear on page 1, with an optimistic forecast for the year 1935. Four pages of full color work are effective as a center spread. The cover is also printed in four colors.

Mount Arbor Nurseries, Shenandoah, Ia.—Bulletin No. 1 offering a large and complete assortment of general nursery stock.

Wilmore's Dahlia Farm & Nursery, Denver, Colo.—Offers of trees, shrubs, evergreens, hardy perennials and bulbs in addition to the usual extensive offers of dahlias, prepared in Mr. Wilmore's own good style. A trade list is inserted at the front of the booklet.

Briercrest Fruit Farm & Nursery, Mount Carmel, Ill.—Publicity on the youngberry for the central west, given by E. L. McJilton. The culture of the plant is well described. Grapes, strawberries and gladiolus bulbs are other items mentioned in the list. It is stated in an insert that an arrangement has been made to distribute the new Acme thornless youngberry bearing plant patent No. 4.

Kalor Nurseries, Blaine, Wash.—A substantial listing of gladiolus bulbs, supplemented by hardy perennials, azaleas, peonies, shrubs, lilies and spring-blooming bulbs. The title of the catalogue is "Eden's Paradise for Flower Fans." Most of the comments are on new gladioli.

Evans Gardens, Santa Monica, Cal.—A 24-page catalogue, featuring new and rare plants, flowering shrubs, trees and vines from all parts of the world. Represented is a collection which it has taken many years to accumulate and which has commercialized only a short time ago. Of special completeness are the lists of eucalyptus, fuchsias and hibiscus.

Boyd Nursery Co., McMinnville, Tenn.—Wholesale price list of shade trees, flowering shrubs, evergreens and roses offered by S. E. Boyd. Hardwood cuttings of shrubs, shrub and tree seeds and hardy collected ferns are offered. Both nursery-grown and collected ornamentals are listed.

Ferdale Nursery, Askov, Minn.—Wholesale price list of evergreens, hardy ferns, native plants and rock garden subjects. All stock is said to have proved to be adapted to northern conditions. Lining-out evergreens are listed, and mention is also made of large sizes for landscaping use.

Paul C. Fritchard, Ottawa, Kan.—Price list of lining-out nursery stock for spring shipment, showing available quantities. Supplies are said to be well cleared in most lines. Among the items are Chinese elm seedlings in various sizes, evonymus, Junipers, Forsythia Fortunei, grape cuttings and in mulberries. The everblooming honeysuckle, Lonicera Hectorii, is featured as an especially desirable plant, blooming from June until killing frost.

Armstrong Nurseries, Ontario, Cal.—One of the outstanding nursery catalogues of the season is the 1935 production of this firm. Color engravings are used to fine advantage on the cover and in the rose section, where the half-tones exhibit good definition of subjects in adequate size. While there is considerable emphasis on materials more adapted for milder climates than many northern gardens enjoy, there are still numerous suggestions that can be given consideration by other than southern gardeners. The fruit section in particular is replete with tropical subjects. Many tempting things appear in the lists of flowering shrubs and trees. The rose section is a de luxe

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Our Trade List is very complete.

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PAINESVILLE, OHIO

presentation of these plants, omitting none of the popular novelties and showing a splendid assortment of tree roses.

Conard-Pyle Co., West Grove, Pa.—Literature on the firm's dealer selling plan describing several rose novelties and mentioning the fact that a total of sixty-five Star roses had been distributed over a 6-year period. Various shrubs, cannas and evergreens are also listed.

W. B. Clarke & Co., San Jose, Cal.—A 3-page mimeographed listing of stock to grow on. Included are grafted conifers, with many rare items; broad-leaved evergreens, climbers and budded roses, as well as a few items in other classifications.

D. Hill Nursery Co., Dundee, Ill.—Retail catalogue, 6x9 inches as a change from the large size used for several seasons, but as attractive and informative as ever. The pages, numbering forty-six, in addition to the cover, are copiously illustrated, and there are not only splendid reproductions of the various evergreens offered, but many diagrammatic suggestions for their use. Color work is freely used. Cultural data are likewise provided. The newer and finer forms are well represented along with the standard varieties.

Herbst Bros., Inc., New York—Price list of tree, flower and shrub seeds for the nursery. Magnolia and prunus varieties are shown on the cover as having been received from Japan just in time for planting. Another featured item is Herbst Bros.' special Scot's pine, recommended for straight-growing trees. Vegetable seeds are listed on three pages.

Burgess Seed & Plant Co., Galesburg, Mich.—A 128-page mail-order catalogue featuring seeds and plants. The cover is printed in four colors, and the use of colored headlines on the pages attracts attention. The range of material is wide, including annual, perennial and bulbous subjects in flowers, nursery items, vegetable seeds and gardeners' equipment. Novelties are many. Double giant fringed petunias decorate the front cover. Within one finds such specialties as tree roses, trained fruit trees, chrysan-

themums in many types and hardy apricots for northern planting. Views of the establishment are shown, and mention is made of wholesale prices for market gardeners.

Inter-State Nurseries, Hamburg, Ia.—A general catalogue of seeds, plants and nursery stock for home planting. There are numerous pages of color work that do a good job of calling attention to the merchandise represented, among which are many novelties in shrubs, perennials and fruits. Roses, as a specialty of the firm, are well represented, being featured in eight pages of color work and on the front cover, which provides a view of the firm's rose gardens at A Century of Progress in Chicago last year. Two facing pages give considerable data on plants and garden design.

W. N. Board's Sons, New Carlisle, O.—Forty-fifth annual catalogue, listing the seed and plant offers of the firm, now operating 1,500 acres of nursery, fruit, seed and livestock farms. The fruit section suggests the prominence of this line with this firm, standard and novelty varieties being well represented. In addition there are shrubs, evergreens, perennials, roses and farm seeds.

Earl E. May Seed Co., Shenandoah, Ia.—A comprehensive mail-order catalogue, containing, it is said, offers of 700 different nursery items, 650 different vegetable and flower seeds, seventy-five varieties of farm seeds and many other things. Gravure, offset lithography and 4-color work are combined in producing the catalogue, which is arranged with many eye-catching devices. Timely is a listing of windbreak material. Mention is made of thirteen retail outlets now being operated by the firm.

Carson R. Stewart, Burghill, O.—Descriptive catalogue of gladioli, issued by an originator, grower and importer of these flowers, who devotes over 200 acres to their production. Three Stewart introductions are listed for 1935. Nearly a score of pages are occupied by the general list, with descriptive notes. A view of this grower's exhibit at the Chicago world's fair last summer is reproduced.

Fruit Tree Planting

H. B. Tukey Discusses Outlook
for Fruit Tree Planting in East

By a peculiar twist of fate the fruit tree situation in America, particularly as it applies to nurserymen, has changed rapidly in the last year or two. Not only is there a shortage of fruit trees in the nursery at present, and not only is there likely to be a shortage there for some time to come, but there are two additional factors operating which will bear watching. These are (1) the trend of fruit tree planting by orchardists and (2) the effect of winter injury in the orchard upon the demand for trees.

As far as the trend in planting is concerned, a recent report by Paul F. Williamson, of Cornell University, gives some figures that are worth juggling a bit and mulling over in one's mind when trying to decide just which way the nursery business is headed. First of all, the number of apple trees in the United States has been declining steadily the last five years at the rate of three and six-tenths per cent a year, until there are now a total of 95,000,000 apple trees, of which 76,000,000 are bearing and 19,000,000 are nonbearing. This is a drop of over fifty per cent from the mark of 1910 and over thirty per cent from 1920. The following table gives the comparisons:

Year	Bearing trees	Nonbearing trees	Total trees
1910	151	66	217
1915	141	61	202
1920	115	36	151
1925	104	34	138
1930	89	27	116
1935	76	19	95

Interestingly enough, however, fruit production has stayed fairly high even with these large reductions in trees, due possibly to the shift of the apple industry into the hands of commercial growers with consequent higher average yields. Yet it is apparent that unless some new plantings are made soon, there will be an underproduction of fruit during the next decade, with resulting higher prices and consequent stimulus to planting.

No matter how you look at it, it would seem that forces are at work to extend the demand for fruit trees over a period of several years. In other words, the present demand for fruit trees, although admittedly extraordinarily high because of unusual conditions, is only part of the general trend of new planting likely to be seen the next few years to meet the curve of falling production.

Varieties.

Eastern orchardists seem to be in an increasingly favorable situation so far as market demands and price are concerned. This is due not only to proximity to markets, but also to the demand for particular varieties which the east finds well suited to its climatic conditions, such as McIntosh. Not only are large markets close at hand, such as Boston, Philadelphia and New York, but there is a growing disposition to develop local and regional markets. The Albany market in New York state has been developed by the state as a

market to which growers can bring their produce, thus satisfying the demands of the Adirondacks, the Berkshires and the entire Capital district. This means that much produce no longer moves to New York city and then back out again to the Albany district. A good share of it is grown not many miles from Albany. A movement is now under way to develop a regional market at Newburgh and also one at Syracuse, besides the development of a large truck market at New York city. This general shift, then, toward local and regional markets gives eastern growers an unusual advantage and is likely to be reflected in a growing interest in orcharding.

As for the variety situation, McIntosh has done especially well in the North Atlantic states. It is a variety that is not grown well in other sections of America. This fact in itself tends to emphasize successful orcharding in the east and attracts others to it.

At the present writing, the varieties in which growers are most interested are the standard sorts, with modest interest in the newer kinds. For the New England states, McIntosh, Delicious and Cortland are possibly most highly regarded. A recent order from Maine consisted of sixty per cent McIntosh, fifteen per cent Delicious, fifteen per cent Cortland and ten per cent other varieties. New York state is interested in McIntosh, Rhode Island Greening, Cortland, 20 Ounce, Northern Spy, Delicious and Rome Beauty. Ohio is interested in Gallia Beauty, Turley and Rome types generally. Michigan is thinking of Steele's Red, Delicious and McIntosh. Apparently the trend is in the direction of apples of the general types of McIntosh, Rome Beauty and Delicious.

BULLETINS RECEIVED.

"Bramble Fruits—How to Grow Them in Illinois," being circular 427 issued by the agricultural experiment station and extension service of the University of Illinois, Urbana, Ill. This is a 72-page illustrated booklet describing the culture of raspberries, blackberries and dewberries, with special reference to requirements in Illinois. The text is divided into three sections, each prepared by a different writer. Part I, by A. S. Colby, chief in small fruit culture at the station, gives directions for growing and marketing bramble fruits. Part II discusses bramble diseases and their control, the author being H. W. Anderson, chief in pomological pathology. Part III, on bramble insects and their control, is by W. P. Flint, chief entomologist.

"Fire Blight of Pears and Related Plants," by H. Earl Thomas and P. A. Ark, the publication being bulletin 586 of the agricultural experiment station of the University of California, Berkeley, Cal. The entire investigations that have been carried on in California, as well as in other states, are reviewed,

AMERICAN NURSERYMAN

symptoms, sources of infection, methods of dissemination of the blight organism, factors which influence development of the blight and control methods being discussed.

PATENTED STRAWBERRY.

The first strawberry variety to be granted a patent—No. 26, August 30, 1932—is now being distributed to growers under the name of Kanner King by the Keith Bros. Nursery, Sawyer, Mich., where it was selected from among more than 5,000 seedlings of known parentage. For the past five years it has been undergoing severe test and has clearly proved its worth, according to the patentees, Bert W. Keith and Bud H. Keith, strawberry specialists.

The strawberry is described as excellent for both canning and table use. The fruit, resembling that of Senator Dunlap in shape, is a bright glossy red outside and red clear through. Color and firmness are held for days. The plants are hardy thrifty growers, doing well even under drought conditions. Record production was reached with 2,280 quarts per acre per day, and even during the extremely dry season of 1934 the variety produced at the rate of 1,440 quarts per acre per day's picking, it is claimed. It is a spring, or June-bearing variety, with an average to long fruiting season. The plants are available only for fruit production, not for resale.

Twenty Million Strawberry Plants

One of the largest stocks of Strawberry Plants in the country. Complete list of all the leading varieties, including New Dorsett and Fairfax.

Also Raspberries, Dewberries, Grapes and other small fruit plants.

Complete packing out service for Nurserymen and seedsmen selling plants not in stock, shipping direct to their customers under tags and permits furnished by them. We guarantee safe arrival on all plants shipped.

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Retain the confidence of your customers by furnishing them the Best Up-to-date Varieties and Disease-free Plants.

Shipments direct under your tags, to avoid delay.

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New Carlisle, Ohio

1500-acre Nursery, Orchards and Seed Farms

RASPBERRIES

Chief

ANDREWS NURSERY CO.

Fariabault, Minnesota

10,000 NORWAY MAPLE

2 and 3-year whips,
fairly well branched

**2,000 HAWTHORN
PAUL'S DOUBLE SCARLET**

2 and 3-year, well branched

Wire our expense for special quotations

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of PRINCETON, N. J.**

**SUPERIOR
Hardy Ornamentals**

**EVERGREENS**

For Seventy years growers
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Lining Out Stock a Specialty
Trade List Now Ready

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Established 1864 : STURGEON BAY, WIS.

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KALMIAS and AZALEAS
Fine nursery grown and collected plants.
Various sizes in any quantity.

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Splendid Stock**

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Shenandoah, Ia.**

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American Elm, up to 2½ ins. diam.
Mugho Pine, B. & B., 12x12 to 18x18.
Norway Spruce, B. & B., 2 to 3 ft.
White Spruce, B. & B., 2 to 3 ft.
Special prices on carload lots.

EVERGREEN NURSERIES, INC.
Plankinton Bldg., Milwaukee, Wis.

OBITUARY

E. W. Townsend, Sr.

E. W. Townsend, Sr., founder of the nursery business at Salisbury, Md., known as E. W. Townsend & Sons, died February 9, after a lingering illness.

Mr. Townsend was a lifelong resident of the county where he was born sixty-one years ago. He started the business in 1902, specializing in strawberries, plants of which he shipped annually into practically every state of the Union and to several foreign countries. A Republican, Mr. Townsend took an active part in politics, and he was a member of the Independent Order of Mechanics and of the Methodist Episcopal church.

All of his survivors live at Salisbury and they include, besides his widow, Mrs. Amelia C. Townsend, two sons, Ernest W., Jr., and Sherman; his mother, Mrs. Elizabeth Townsend, two brothers and a sister. Funeral services were held at his late home February 11, with burial at Wicomico memorial park.

George A. Wagner.

Aged 94 years, George A. Wagner, who engaged in the nursery business from 1872 until 1926, died at Landisburg, Pa., at the home of a daughter February 12.

Mr. Wagner was a son of the late Samuel and Elizabeth Tressler Wagner and was educated at the Mount Dempsey Academy, Landisburg. He taught school in Perry county, Pa., for a time, then became a fruit grower and nurseryman, owning the Perry Nursery, near Alinda. He was also in partnership in nurseries with Mr. Landis, at McCullochs Mills, and with the late Silas DeWalt, in Sheaffer's Valley. He was an active member of St. Peter's Reformed church, Spring township, and he had served as school director in the township.

Besides his widow, Mrs. Susan Loy Wagner, Mr. Wagner is survived by four sons, four married daughters, fifty grandchildren and fifty-one great-grandchildren. Funeral services were held from St. Peter's Reformed church, February 15, with burial at the adjoining cemetery.

Vincent Peterson.

Nurserymen in every part of Minnesota will regret to hear of the recent death of Vincent Peterson, plant pathologist with the state nursery inspection service at Minneapolis. "Vince," as he was known to all nurserymen and fruit growers in the state, was ill but a few days, dying in St. Barnabas hospital, Minneapolis. The deceased was born in 1903 at Balfour, N. D. Going to the college of agriculture of the University of Minnesota, he was graduated in 1928 and then went into the nursery inspection work under Professor Ruggles, state entomologist. Surviving are the widow and a daughter, 3. The funeral was held February 16 in Minneapolis. L. S.

G. WALTER BURWELL, of the Burwell Nurseries Co., Columbus, O., discussed "Plants as Heirlooms" February 16, before the Columbus Horticultural Club, at the Horticulture building, Ohio State University, Columbus.

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ROSES**

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Los Angeles, Teplitz, Talisman,
President Herbert Hoover and
many others.

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**Milton Nursery Co.
Milton, Oregon**

Maple, in assortment for Parks, Cemeteries, Subdivisions and Landscape Work. Birch in variety, Hawthorn and other Ornamental and Shade Trees.

Ample and Complete Stocks.

Car lot shipments at reasonable freight rates.

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Wholesale Rose Growers
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Home-Grown Chinese Elm Seed

Ulmus Pumila for early spring planting.

Ulmus Parvifolia for late fall delivery.

Seedlings grown on contract.

HOME NURSERY CO., Richland, Wash.

MAHALEB SEED

Local seed. High
germinating quality.

WASHINGTON NURSERIES

Toppenish, Wash.

HILL'S EVERGREENS

Complete assortment of lining out sizes.
Also larger grades for landscaping.
Send for our wholesale catalogue.

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Herbaceous Perennials

C. W. Wood Comments on Less Common Varieties of Hardy Plants Deserving Attention

MORE PLANTS FOR VARIETY.

Eccremocarpus Scaber.

Although that rare South American climber, *Eccremocarpus scaber*, is not hardy in the northern United States, we of that section can enjoy it as an annual, and south of the Ohio river it should act as a true perennial. In northern Michigan the plant gets about five feet high in a single season of growth, climbing by branched tendrils and clothing itself in ornamental, bipinnate leaves. From August onward, depending largely upon the time seeds are started into growth, it carries an abundance of showy orange flowers, somewhat tubular in shape. Where it is hardy and can remain in the open from year to year, it will attain a greater height (ten feet, according to some authorities) and will bloom during July and August, perhaps longer. It is easily grown from seeds, germinating readily and making splendid progress in a warm sunny exposure.

Draba Pyrenaica.

Whether *Draba pyrenaica* is a *draba* or a *petrocallis* is of more interest to the botanist than it is to the plant grower, but the latter should be more concerned about the value of the plant as a garden ornament. It is one of the few *drabas*, or *petrocallis*, with other than yellow or white flowers, the color in this case being purplish. It is a 2-inch plant and flowers in late May or June.

Judging from the complaints of correspondents and from my own experience, the plant is likely to behave badly in the climate of eastern America, if it is given the treatment recommended in literature. Correvon advises wall planting; others say it thrives under com-

mon garden treatment. But it does not do well for me under either of these conditions. After trying it for two or three years in a number of situations, I came to the conclusion that it was not adapted to my climate. Later, however, after experimenting with it in soils differing in moisture content, I found that it behaves well if given sufficient moisture. In the garden it does well on the north side of a rock in a soil containing enough leaf mold to retain moisture; in nursery frames, where its moisture requirements are taken care of, it is as easy to cultivate as any of the cresses. It comes readily from seed and transplants without trouble.

Galegas.

If you want to see how little the goat's-rues are known in America, glance over a representative list of catalogues published in this country. Yet, *galegas* are of the easiest possible culture, requiring no more than common border treatment, and do not need dividing and replanting like so many of our better known border plants. In addition to their ease of culture, they possess the happy faculty of flowering during most of the summer and are good cutting subjects. Some representative of the genus should be in every planting, a happy condition which will not be reached until nurserymen take more interest in the plants. They are legumes, having the pinnate foliage of that class and the peculiar pea-like flowers.

Almost anything that you get under the name of *galega* will make a good garden plant; unfortunately, though, most of the 120 species, which were formerly included here, have been transferred by botanists to *tephrosia*, leaving just six distinct species in *galega*. The most popular species and the one most readily available is *G. officinalis*. It is to be had in any number of forms, varying from the 2 to 3-foot plant with lilac flowers found in the type through the forms with flowers of pure white, white and lavender, pink, rose, etc. There are double forms of some of these, one with the formidable name of *G. officinalis nana rosea flora plena* being particularly good. European lists contain a number of named forms, such as *Duchess of Bedford* (white and lilac) and *Lady Wilson* (white and blue), of which I can say nothing except that they sound interesting. The variety *Hartlandii*, with flowers variegated white and lavender, is offered in this country. It is easily grown from seeds.

Romanzoffia.

The one *romanzoffia* that I have grown, *R. sitchensis*, is one of north-west America's finest gifts to the alpine gardener. Its lobed round leaves grow in dense tufts, green above and brownish below, and support slender 3 to 6-inch scapes, carrying a raceme of white funnel-formed flowers, the entire

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aspect of the plant giving the effect of a saxifrage. Mere words cannot picture the charm of this alpine, but it may be enjoyed by all who give it its few wants. It is said to grow on moist slopes in part shade, but it seems to need some shade during most of the day when it is brought to the heat and dryness of low altitudes. It is probably best propagated from seeds.

Cornus Canadensis.

It has taken American gardeners a long time to begin to appreciate the many fine qualities of *Cornus canadensis*. Now that its desirable features have been noised around and it has been used with good effect in a number of plantings, gardeners are using it in large quantities, notwithstanding the fact that many do not succeed with it as they should. It is not unlikely that much of this lack of success can be traced to the fact that the plant needs a soil that is intensely acid. If the plant is given that kind of growing medium and part shade, there is little reason why any gardener outside the hottest parts of the country cannot grow it.

The bunchberry (its common name) makes a 4 to 6-inch plant, producing masses of white flowers (the showy white parts being in reality bracts) an inch or more across above its whorled leaves. The blooms are followed by bunches of bright red berries, which form no small part of the plant's charm. It may be propagated by division of the running root stocks. Seeds, which are slow to germinate, are sometimes used. They should be planted in an outdoor frame in autumn or stratified.

Polygala Paucifolia.

Every time I look at a catalogue I am reminded of the fact that we know scarcely a thing about our native flora. This was brought to mind recently when I started to look for a source of supply of *Polygala paucifolia*. Out of a stack of catalogues at least two

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feet high, just one listed this plant. Yet, it is a fine garden subject and would undoubtedly be much used in landscaping large estates as well as for odd nooks in the small garden, if the material were available.

Here in the north the plant is found carpeting many a damp forest, often running into sunny fields that are not too dry. It is always found in acid soil according to my experience with wild stock. Given such conditions in gardens, it will grow and increase, producing its curious, showy, winged flowers in May and June, usually a deep rosy shade, but sometimes, although rarely, one finds a pure white and occasionally a violet form. This polygala may be grown from seeds by the patient grower, but it is not easy to get seeds, as they are usually the result of cleistogamous flowers and are not easy to find. When I could obtain them, I have had some success in germinating the seeds and growing the plants by sowing the seeds as soon as ripe in pots of finely chopped sphagnum moss. It may also be propagated by division, not a slow process when its far-reaching underground runners are carefully handled.

Silphium Terebinthinaceum.

Silphium terebinthinaceum, a member of a large genus of native composites and known to inhabitants of the middle west as prairie dock, makes an impressive appearance in the hardy border and should be more generally used in creating striking pictures. In good soil and full sun it will attain a height of five or six feet, with foot-long leaves, mostly at the base of the plant, and heads of yellow flowers from July until September. The more familiar compass plant, *S. laciniatum*, with once or twice pinnately parted leaves and characteristic sunflower-like heads, also deserves consideration. All silphioms are easily reproduced from seeds and may be divided.

C. W. W.

VARIEGATED WEIGELAS.

Interesting additions to the useful weigela group are the variegated-leaved sports. Offered in the trade recently is a variety that has a reddish stem and deep green leaves with a yellowish white border, the two features combining to make a striking effect. The blooms are pink, showing two-toned, and completely cover the plant in late May. Like *Philadelphus Virginal*, this weigela produces a few scattering blooms all summer.

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whip grafting is resorted to, using *Weigela florida* or *Hendersonii* for stock. It is also possible to use the roots of the selected plants which have run out.

TRUEHEDGE COLUMNBERRY.

Truehedge Columberry represents another advance in Jarberry selection that seems likely to provide planters with an excellent hedge plant. The original specimens were discovered several years ago by M. H. Horvath in a planting of *Berberis Thunbergii* pluriflora, being noted for their exceptionally erect growth. The strain now offered as Truehedge Columberry is the result of careful selection of progeny through five plant generations. Plant patent 110 was granted the introduction.

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Visitors to the convention of the American Association of Nurserymen in New York last July were greatly attracted by specimens of the plant that were exhibited there, and heavy sales of the Columberry to nurserymen resulted in the succeeding weeks. The Cole Nursery Co., Painesville, O., is introducing the plant.

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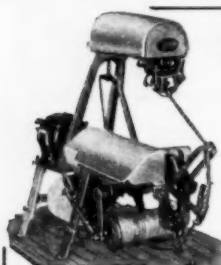
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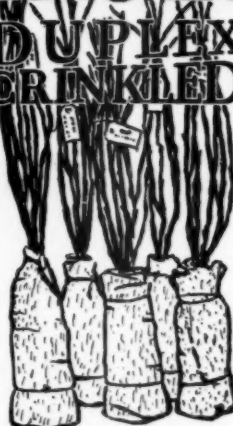
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